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ABSTRACT

This guide presents procedures for teaching programmed reading, language arts, math, SRA reading, and handwriting in Behavior Analysis classrooms. The McGraw-Hill Programmed Reading curriculum is described, placement instructions are reviewed, teaching tips are offered, and remediation procedures are suggested. A Language Arts Index is presented in which all new reading skills introduced in Programmed Reading are listed and cross-referenced to specific sections of 19 different language arts books. The Singer Sets and Numbers math series is described, placement instructions are reviewed, suggestions for preparing to teach and for teaching Singer math are presented, ways to use math aids are discussed, and the evaluation and remediation of student progress are examined briefly. The SRA Reading Laboratory Series is described, steps for student placement are listed, and procedures for using power builders and listening skill builders are presented. The Behavior Analysis Handwriting Primer is described, the pretest is discussed, scoring examples for the primer and pretest are presented, specific teaching procedures involved in teaching handwriting are delineated, suggestions on how to keep a check on accuracy are offered, and a few tips on management and organization are given. A supplement for staff trainers is also included which presents materials related to training others to teach Programmed Reading and Singer Math in Behavior Analysis classrooms. (JMB)

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CURRICULUM PROCEDURES

for the Behavior Analysis Classroom

A Teaching Guide

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Department of Human Development
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by Don Dorsey
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1

Programmed Reading

by
Don Dorsey
Joyce Mohamoud
Annabelle Nelson
Jill Becker

General Description

The reading curriculum used in Behavior Analysis classrooms is *Programmed Reading* (published by McGraw-Hill), which consists of a set of programmed readers, supplemental materials, and comprehensive Teacher's Guides. The core of the program is the programmed readers, in which each student works individually and at his own pace. The series has been revised for Fall, 1973, and there are now a total of 24 programmed readers (instead of 22), divided into Series I (Books 1A and 1-7), Series II (Books 8-15), and Series III (Books 16-23).

It is important that the materials be used properly. Supply each child with a slider (a thin piece of stiff paper that will cover the answers), and be certain that the children read each item, mark their response, and THEN move the slider down to check their answer. Normally, the slider will be moved down after each response; in second or third grade, however, you might ask good readers to complete an entire page before checking their answers.

The readers are divided into two parts. When the child has finished part 1, he turns his book over, opens the cover, and begins working on part 2.

Teacher's Guides

McGraw-Hill publishes five different Teacher's Guides for the *Programmed Reading* series. In your Behavior Analysis classroom, you will be using the Guides for Books 1 and 1A, 2-7, 8-15, and 16-23. The *Behavior Analysis Phonics Primer* is used in place of *Programmed Prereading* Kits I and II.

The most important features of the Teacher's Guides are the listing of new words and the pages on which they are found, plus the content summaries of each story (which are especially helpful in asking comprehension questions). In addition to these features, there are well-developed activities for tutoring and class presentations in each chapter of the manual. (For the new Third Edition, consult the new Activity Books for enrichment ideas.)

It must be emphasized that the publisher's guides were designed for teachers who work in traditional classrooms. Since the individualized approach of Behavior Analysis requires special procedures, use the Behavior Analysis *Programmed Reading* teaching guide for all basic information, and the publisher's guide as a supplement.

Response Booklets

Although Book 1A is always consumed, Books 1-23 are reusable if children write their answers in response booklets. In the new edition, response booklets cover Books 1-7, 8-15, and 16-23.

Each child must be carefully taught the use of the response booklets or he will make numerous mistakes. When a child uses a response booklet for the first time, spend some time demonstrating its proper use. Model, let the child try it out, and praise heavily for success. Later in the period, reinforce the child for continuing to use the response booklet properly. Follow the complete directions for teachers which are included in each response booklet.

Storybooks

The storybooks accompanying the *Programmed Reading* series provide children with practice in reading from a conventional book. In the new edition, there are three storybooks for each Series I reader (Books 1-7) and two storybooks for each Series II reader (Books 8-15). By using the storybooks, the children can practice their skills in sounding out new words composed of sounds that they have learned. Storybooks are also quite valuable as reinforcers as children often buy them as back-ups.

Webstermasters

Webstermasters are duplicating masters which serve as supplementary material in the form of games, puzzles, and comprehension exercises. They are especially helpful for remediation in Books 1-14.

Imbedded Tests

Each programmed reader includes four tests, one after each quarter-book. Performance checks by means of these tests is vital to the success of your program. The proper use of quarter-book tests and also the end-of-book tests is outlined later in this manual.

Placement

Your first concern as a reading teacher in an individualized instruction classroom will be where to start each child in the program.

Kindergartners

Kindergarten children usually begin school with few reading skills. Children with no reading skills will start immediately in the *Behavior Analysis Phonics Primer*. Children who have come from a preschool experience may be able to start in Book 1A or higher. Start with the procedure outlined below for kindergartners who are transferred into your class, and continue testing until the child fails to meet the criterion.

Children With Behavior Analysis Experience

1. Check with your Staff Trainer for placement information from the Weekly Individual Progress Report (WIPR) for last year for any child coming to you from another Behavior Analysis classroom in your district.
2. Verify this child's placement by giving him the end-of-book test that is one book below the reader in which he was last working. For example, a child who was working in Book 9 should be given the end-of-book test for Book 8.
3. If the child scores better than 80 percent on that test, give him the end-of-book test for the next higher book. If he scores less than 80 percent, give him the end-of-book test for the next lower book.

4. After determining the approximate book placement, give the child the quarter-book tests for that book until you find the place where his performance does not meet the 80 percent criterion. For example, if a child gets 60 percent on the end-of-book test for Book 18, and 95 percent on the end-of-book test for Book 17, give him the third quarter-book test for Book 18. If a child gets 82 percent on the end-of-book test for Book 10, give him the first quarter-book test for Book 11, and keep testing until he cannot meet the 80 percent criterion. (*NOTE:* Vinyl overlays should be used when placement testing, so that the reader and test booklets can be reused.)
5. Start the child in the quarter-book section where he did not answer at least 80 percent of the questions correctly. Monitor his performance closely for several days to double-check this placement, and retest if there is any question.

Transfer Students

Throughout the year you will invariably have transfer students entering your classroom. Giving these children proper placement in *Programmed Reading* causes some minor difficulties. Use the same end-of-book test placement procedure described above, with these starting points:

Kindergarten. Begin with the first comprehensive test in the *Behavior Analysis Phonics Primer.* Find the point at which the child fails to meet criterion as stated in the *Behavior Analysis Phonics Primer* manual, and start him there. A few tutoring sessions should enable him to join a regular Primer group shortly.

First grade. Give the end-of-book test for Book 4, and work from there as you would in verifying placement of Follow Through children during the first week of school.

Second grade. Start with the end-of-book test for Book 9.

Third grade. Start with the end-of-book test for Book 13.

In all cases, examine the results carefully. Perhaps some tutoring will teach a child the phonics skills he needs to start a book or two higher than he actually placed. Don't forget to show the child what kind of response is expected. A child who is unfamiliar with the format of the *Programmed Reading* series will have to be taught how to mark a book before he can be tested.

Summary

Kindergartners

1. If no reading experience, start in *Behavior Analysis Phonics Primer.*
2. If some experience, test until proper placement is found.

Children with Behavior Analysis Experience

1. Check with Staff Trainer for WIPR information from last year.
2. Give end-of-book test for book that is one book below last placement.
3. Continue testing using end-of-book or quarter-book tests until child fails to get 80 percent correct.

Transfer Students

1. If child is in Kindergarten, start testing with the *Behavior Analysis Phonics Primer.*
2. If child is in First Grade, start testing with Book 4.
3. If child is in Second Grade, start testing with Book 9.
4. If child is in Third Grade, start testing with Book 13.

How to Teach Programmed Reading

The method of teaching *Programmed Reading* in Behavior Analysis classrooms is quite well specified. Be sure that you fully understand the procedures before you start.

Your reading group will be seated together around a table or at individual desks that are grouped

together, so that you can work with and monitor the progress of all of the children at once. Follow these procedures for the best results:

1. Be organized! Have all of the readers ready to use, and be sure that you are familiar with the materials that each child will be working with in the session. If you are busy getting each child ready at the beginning of a session, you will lose the attention of most of the children before you start!
2. When you are preparing for this session, use the Teacher's Guide to identify all new words that the students will come across in their reading. Go through the readers and put a star by all new words. Have your students read all starred words for you during the session.
3. When it is time for the session to begin, start working with the first child who is ready. Do not spend this crucial time trying to convince the stragglers to hurry up.
4. Don't give assignments, but rather begin immediately to monitor oral reading. Ask each child to read aloud to you frequently, and give tokens and praise for this. Move around the group rapidly, making each contact short (no more than 45 seconds as a rule of thumb), and be sure to randomize these contacts rather than contacting each child in order as he is sitting at the table. On the average, make four or five of these teaching contacts per minute. After a child reads to you, ask him comprehension questions and questions on the structural analysis skills contained in the *Programmed Reading* series (such as compound words, suffixes, prefixes, digraphs, dipthongs, etc.).
5. **Trouble contacts** are made when a child has reached a new word or a word that he doesn't know.
   a. *New words.* When the child asks for help on a new word, praise him for raising his hand, and say, "The word is _____. Now what is the word?" Praise him for saying the word correctly, and on your next contact with this child, ask him to say the word again.
   b. *Old words.* Ask him what each sound says, tell him the correct sound if he can't tell you, praise him, and then ask him to say the whole word.
   c. As a rule of thumb, give tokens for unmodeled, correct responses only. However, you will want to use the principle of **shaping** and giving tokens for improvement in the child's ability to sound out words. But be careful—children can learn very quickly that they can get a lot of attention and tokens for making mistakes.
6. Make many short **maintenance contacts**. The only way that you can keep eight or nine children working in individual materials for an entire session is to contact each child often. As you move about the group and work with each child, watch the rest of the group. Give behavior-specific praise to children who are working. This can be done easily if you glance up every few seconds and observe the other children, and praise (and give tokens to) working children.
7. When a child comes to an in-book test, have him work it just as he would work in the rest of the book, except, of course, that he will not have the answers. Ask him to raise his hand when he has finished the test, and check his answers. If he completes at least 80 percent of the questions correctly, he may continue. If he fails to complete the test with 80 percent accuracy, carefully check his answers, determine what specific problems the child is having, and either recycle him or plan remedial exercises. (See the last section of this manual for remediation suggestions.) If the child is cheating on the materials or is using the materials incorrectly, this should show up on the test. If you suspect that this is the problem, give the child further instruction and recycle him.
8. When a child finishes a book or an entire series, check his progress by giving him the appropriate end-of-book or end-of-series test.

Remediation Procedures

When a child completes an in-book test with less than 80 percent accuracy, he has demonstrated that the instruction he received has not been effective, and that he has not been taught the skills being tested. Simply recycling the child through the same work again will most likely not be effective, and it can lead to practicing old mistakes and repeating incorrect responses to insufficient prompts.

If you are sure that the child's problems are not caused by cheating or incorrect use of the materials, choose supplemental materials based on his performance on in-book tests. If a child is working in *Programmed Reading*, Books 1-14, the Webstermasters are a good source of worksheets. The skill content of these sheets corresponds well with the skill content of the *Programmed Reading*

series. When a child has progressed into Books 15-23, the McGraw-Hill Teacher's Guides and the Activity Books are the best source of supplemental activities for remediation. You will find page references within the series, as well as suggestions for activities outside the books.

The Language Arts Index (Chapter 2) provides you with another excellent source of remediation. It lists concepts occurring in the reading, spelling, and handwriting programs and tells you where to find them. If a child is having trouble with a concept in *Programmed Reading,* or if you are planning introduction of new concepts, the Index will help you find other material that might be useful.

When you plan remediation exercises, design a tutoring program that includes learning the skills that the child will need in order to complete the test page. If this is done, you will be confident that when the child has successfully demonstrated his skills while being tutored, he will also be able to achieve the accuracy criterion on the in-book test. Readminister the test page after tutoring and then place the child back in the *Programmed Reading* book.

Do not plan tutoring for a child simply because he did not know the word meanings on a test page. On many of the pages in *Programmed Reading* the context of the word presentation does not cue the child on the meaning of the word. But knowing the meaning of the words is important on the test pages. If a child does not know the meaning of a word, but has otherwise successfully completed a test page, do not put him into supplemental work. Rather, verbally retest the next time the word occurs. The child can be tutored on word meanings when, and if, the problem occurs with excessive frequency.

2 Language Arts Index

by Jill Becker
Risa Graubard
Joyce Mohamoud

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2

Language Arts Index

by
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How to Use the Index

The Language Arts Index is designed to help you use some of the language arts curriculum materials that might be available in your school district. Every new Reading Skill introduced in *Programmed Reading* (1968 and 1973 editions) is listed and referenced, if appropriate. We have gone to 19 different curriculum language arts books to give a wide range of applicability to this index.

To use the Language Arts Index follow these steps:

1. Look up the Reading Skill in the Table of Contents. If there is a question of what category the item falls under, look in your *Programmed Reading Teacher's Manual.*
2. Turn to the page indicated in the Table of Contents. Within each category the items are listed in alphabetical order.
3. Follow the horizontal column to the right. Curriculum books are listed in Roman numerals followed by a book letter or number (if appropriate) and page numbers.
4. Turn to the Reference section and look up the title of the curriculum.

The intent of this Index is simply to provide access to pages in materials, already available, that may give the teacher additional ideas for instruction in difficult reading skills. Do not feel that you are required to purchase them if they are not presently available.

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
Capital Letters					
Beginning a sentence	1	25			
Proper names	1	32			
Beginning of words					
B	2	39	IV	A	9-10,51-52,62
			XI		17
			XVII		1,2
			X	Vol. I	3
			VIII	level 2	15,44,46,59,63, 65,67,70
			V	A	units 6,9,10
			V	B	unit 3
C	1	25			
D	1	134			
F	2	11	IV	A	19-20,55-56, 61-62,71-72
			V	A	unit 7,8,10
			V	B	unit 3
			VIII	level 2	18,51,55,60
			X	Vol. I	6
			XI		17
			XVII		2
M	1	125			
N	1	34			
P	1	125			
S	1	43			
T	1	28			
Compound Words	From Book 2 in both series on		II	3	29
Consonants			II	1	52
b	1	32			
b (silent as in climb)	13	50			
c	1	18			
c=/s/	9	120	III	A	10,11,13,15, 19,21,62,63
			III	B	6,15,17,21,25,26
			IV	B	65,66,68,69
			XII		44
			XVII		7,16
			XVI		37,40,77
			VI	Brown	3.0
			V	D	unit 18
d	1	126			
f	1	10			
g	1	141			
g=/j/	10	103	III	A	42,43,47,49,61-63
			III	B	14,17,25,26
			IV	B	67-69
			V	D	unit 18
			X	Vol. II	46
			XII		44
			XVI		77-79
			XVII		8,100,101
			XVIII	1	37,46,49
			XIX	level 6	8

*When the page numbers for the 1968 edition are different, they will appear in parentheses.

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
h	1	73			
h (silent as in hour)	16	53			
	(16)	(49)			
j=/j/	6	4	III	A	42,47-49,53,62
			IV	A	21-24,63-64,69-72
			V	B	unit 2
			VII		1,2
			VIII	level 2	18,44,59
			X	Vol. I	13
			XI		19
			XIII		60,61,64
			XVI		85,92,93
k=/k/	2	99	III	A	8-9,13-15,17 21,35,51,62,63
			IV	A	25-26,59-62,71-72
			V	A	units 16,17,20,22,23
			V	B	units 2,4
			XIII	level 2	30-33
k (silent as in knife)	15	95			
	(15)	(97)	III	B	31,36-38,46,47,49,63
			III	D	30
			IV	3	90-93
			V	D	unit 19
			VI	Olive	4.5
			X	Vol. II	3
			XI		126,128
			XII		102,109,110
small L (l)	2	128	III	A	34,35,38,39, 45,49,51,57,62,63
			IV	A	25-26,73-74,79-94
			XIII		66,67,69
			V	B	units 1,4
			V	A	units 11,13,15,27,29
			VIII	level 2	21,53,55,60
l (silent as in half)	16	31			
	(16)	(46)	V	D	unit 19
			XVII		110
r	2	51	III	A	18,19,21,23,26,27, 33,39,62
			IV	A	33,34,87-94,99,100
			V	A	units 11,14,15,28,29
			V	B	units 2,5
			VIII	level 2	24,42,46,59
			XIII		70-72
			XVI		83-87
s	1	25			
s=/s/	1	110	XIII		16,17
	(1)	(111)	XVI		15,16
			XVII	1	
s (plural of nouns) and s (singular of verbs)	1	27	All Curriculums referenced refer to s--singular & plural		
	1	45	III	A	5,7,9,11,15,21,27, 41,43,45,49,51,59,63
			III	B	2,12,17,19,23,27,45, 49,50,63

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			III	D	5,7,11,12,15,21,23,25, 37,43,45,47,59,65,69, 73,77,79,83,84,87
			IV	B	97,100,101,106, 107,108,112
			IV	3	58,62,71
			V	D	unit 14
			V	C	unit 29
			V	B	units 11,12
			VI	Gold	4.0
				Olive	4.5
				Green	3.5
				Brown	3.0
			IX	level 4	15,64,79,82
			X	Vol. II	88,90,94
t (silent as in whistle)	15 (15)	94 (95)	(see "Silent k")		
v=/v/	4	127	III	A	40,41,47-49,61-63
			IV	A	37-40,98-100
			IV	B	5-14
			XIII		50-51,53-57
			V	A	units 28,29
			V	B	unit 4
			VIII	level 2	27
w=/w/	3	101	III	A	30,31,38,41, 49,53,57,62
			IV	A	41-42,45-46,83-84,91-94
			IV	B	5-14
			XIII		48,49,53-57
			V	A	units 2,3,5
			V	B	unit 3
			VIII	level 2	27,30,32,51,55,60
			XVI		2,4,6,25,26,34
x=/ks/	5	37	III	B	16,17,19,26,31,45
			IV	A	41,42,45-46,101,105,106
			IV	B	5-14
			VIII	level 2	27,30,32,63,65,67,70
y	6	66	III	B	33,35,38,47
			IV	A	43,44,102
			IV	B	82-85,117-120
			IV	3	35-38
			X	Vol. II	49
			XII		25,118
			XIII		53,54
			XVII		2,9,10,45
			XVIII		41,47,50
			XIX	level 6	8
z=/z/	8	39	III	A	44,47-49,61,62
			IV	A	43,44,103-106
			IV	B	1-14
			IV	3	1-2,5-7
			XIII		60,61,63
			VIII	level 2	27
			XVII		1-2,9,10
Contractions			II	1	107-108
			III	A	55,57,61,67

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			III	B	33,39,41,53,61,63,30
			III	D	9,13,21,39,43,45-47,55,57, 59,69,73,77,79,81,83,87
I'll, I'm, that's	3	132	III	C	26
			IV	B	123-128
			XII		74-78,125
			VI	Red	4.0
				Tan	4.5
				Brown	3.0
			IX	level 4	85,88,93,95
Digraphs & Trigraphs					
bl	3	82			
br	2	103			
cl	5	81			
ch=/č/	2	83	III	A	50,52,55,57,
	(2)	(86)			60-63
			IV	A	250-51,253-56
			IV	B	164-66,174-75
			V	B	21,23
			VI	Gold	4.0
			IX	level 4	11
			X	Vol. I	32
			X	Vol. II	34
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			XIII		26,27
			XIV		217,226
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			IV	B	164-66,174-75
			XII		102,108,110
			XVII		11,16
cr	3	73			
ct	7	20			
fl	4	79			
fr	6	74			
ft	4	87			
gh (as in high)	12	18			
gh=/f/ (as in laugh)	17	16	VI	Green	3.5
	(17)	(129)	XVII		75,93
ght	12	3			
gn (as in sign)	12	16			
gr	3	59			
gl	3	34			
lf	5	55			
lk	3	43			
lp	4	3			
lt	7	60			
mp	5	18			
ng	1	54			
nt	4	62			
ph=/f/ (as in orphan)	15	73	V	D	unit 18
	(15)	(72)	XVII		11,74
pr	2	76			
sc=/s/ (as in scientist)	17	34	XIV		31
			XVII		15,16,17
sh	1	118	III	A	52,53,57,61,63

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			III	B	2,3,8,9,13,18, 27,35,49,62
			III	C	36
			III	D	28
			IV	A	250-51,253-56
			IV	B	164-66,174-75
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			V	B	unit 21,23
sk	3	75			
sl	3	11			
sm	6	133			
sn	2	7			
sp	3	50			
spl	3	128			
spr	7	133			
st	2	32			
str	7	1			
sw	4	75			
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			XVII		109
th=/θ/	1	9	XV		lessons 17,18,19,20
			III	A	54,55,59-63
			III	B	2,3,8,9,13,18, 27,35,49,62
			IV	A	248-49,253-56
			XI		126,127
			IV	B	164-66,174-75
			XII		103,108,110
			XIII		10,11,14,15,52
			XIV		27-30
			V	B	units 22,23
			X	Vol. II	3,66,69,86
			IX	level 5	3
			XIV		217,221
			XVI		48
			XVII		13
th=/t/	20	127			
tr	2	59			
tw	6	124			
wh=/h/	5	11			
wh=/w/	5	114			
wr=/r/	16	54			
xt	5	42			
Double Consonants					
cc	11	54			
ff	2	7			
gg	2	3	V	C	units 32,33
			VI	Green	3.5
			X	Vol. II	1
			XI		106
ll	3	17	III	B	52,59,60,64
			V	D	unit 20
			XVII		9,10
mm	4	75			

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
nn	1	69			
pp	4	73			
tt	5	57			
zz	8	42			
Possessives	1	75	I	2	23
			II	1	96
Punctuation					
apostrophe	1	75	III	A	55,57,61,64
			III	B	2,12,19,59,61
			III	D	39,43,45,47,55,57, 59,69 73,77,79,87
colon	8	5			
	(8)	(4)			
comma	2	4	I	1	78
			II	1	93
exclamation mark	2	39			
hyphenated word	9	96			
period	1	1	I	1	74
			II	1	81
question mark	1	1	II	1	82
quotation mark	6	80	II	1	94-95
semicolon	13	26			
Sight Words					
ache	21	130			
	(21)	(125)			
adventure	14	66	(omitted in old series)		
Aegean	23	138			
	(21)	(140)			
Aegeus	23	132			
	(21)	(134)			
again	15	67			
	(15)	(66)			
Alcema	23	56			
	(21)	(57)			
ancient	20	12			
	(20	(11)			
Arachne	22	87			
	(20)	(105)			
beautiful	20	4			
	(20)	(12)			
been	12	57			
Blood	16	100			
	(16)	(104)			
business	18	9			
busy	13	123			
Cassiopeia	23	45			
	(21)	(45)			
Cepheus	23	45			
	(21)	(45)			
Charon	22	96			
	(20)	(90)			
clothes	16	97			
	(16)	(101)			
course	17	29			
	(17)	(18)			

Reading Skill	Programmed Reading 3rd Edition* Book	Page	Cross References Curriculum	Book	Page
do	13	1			
does	8	70			
Electryon	23	56			
	(21)	(57)			
Eurysteus	23	85			
	(21)	(85)			
eight	16	111			
	(16)	(97)			
eye	15	55			
February	15	44			
four	16	95			
	(16)	(97)			
friend	17	32			
goes	12	4			
here	9	28			
I	1	1			
idea	11	104			
	(18)	(113)			
island	20	134			
	(20)	(25)			
lamb	6	128			
laugh	17	16			
	(17)	(15)			
lyre	20	67			
	(20)	(68)			
machine	16	98			
	(16)	(102)			
main	13	12	(omitted in old series)		
Mediterranean	21	58			
	(20)	(10)			
Mr.	12	27			
	(12)	(109)			
Mrs.	12	109			
Mycenae	23	92			
	(21)	(92)			
Nemea	23	97			
	(21)	(97)			
no	1	1			
ocean	16	2			
of	6	91			
on	1	47			
one	16	95			
	(16)	(96)			
owe	18	113			
oxygen	17	64			
	(17)	(55)			
patience	23	18			
	(21)	(18)			
people	16	115			
Phaeton	22	120			
	(20)	(120)			
quiet	20	25			
	(20)	(114)			
review	21	69			
	(20)	(1)			
Rhea	22	24			
	(20)	(24)			

Reading Skill	Programmed Reading 3rd Edition* Book	Page	Cross References Curriculum	Book	Page
said	14	67			
says	8	120			
sesame	19	8			
shoe	21	33	(omitted in old series)		
son	18	2			
	(18)	(4)			
the	1	109			
their	15	23			
there	8	139			
	(8)	(138)			
they	7	104			
to	2	107			
tongue	21	128			
	(21)	(106)			
touch	15	99			
	(15)	(100)			
two	16	95			
	(16)	(96)			
up	3	29			
Wednesday	15	72			
	(15)	(71)			
where	8	138			
woman	14	79			
women	14	79			
work	8	5	(omitted in old series)		
yes	1	1			
you	8	1			
Sight Words That Rhyme			I	1	2
bow (rhymes with how)	16	62			
	(15)	(62)			
close (rhymes with dose)	15	82			
	(15)	(81)			
give (rhymes with live)	4	132			
object (rhymes with reflect)	18	125			
read (rhymes with bread)	18	37			
	(18)	(32)			
sow (rhymes with hoe)	20	119			
	(20)	(85)			
sow (rhymes with how)	23	112			
	(21)	(11?)			
tear (rhymes with ear)	15	68			
	(15)	(67)			
wound (rhymes with sound)	19	30			
Vowels					
a=/a/	11	1	III	B	29,31,38,43,53
			III	C	18
			IV	A	113-122
			IV	B	15-18,23,28,29,34,35,40
			V	C	unit 3
			IX	level 3	29,35
			XI		37,46-50,56,57, 63,64,69,70
			XII		10,11,25,26

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			IV	3	13-21,24-26,29-32
			XVII		3-5,27-29,41
a=/ey/	11	107	III	B	28-29,31,38,43,53
	(11)	(103)			
			III	C	18
			IV	A	161-74
			IV	B	43,44,47,50,51,54,55
			V	B	units 30,33
			IX	level 4	18,19,25,37,40
			XI		82-87
			XII		24-26,39-41
			XVII		41
a+e=/ey/	9	74	III	B	28-29,31,38,43,53
			III	C	18
			IV	B	43,44,47,50-51,54-55
			VI	Green	3.5
				Olive	2.3
			IX	level 4	18,19,25
			X	Vol. I	19
			XI		37,82-87,103-106
			XII		24-26,39-41
			XVII		35-39,101
ai=/ey/	17	26	IV	B	131,134,135,136
	(17)	(28)	V	B	unit 32
			V	C	units 11,12
			V	D	units 19,20
			IX	level 4	43,58,63
			X	Vol. II	7
			XII		80-81
			XVIII	1	12
au=/æ/ (as in laugh)	17	16			
au=/ɔh/ (as in fault)	19	30	IV	B	143-146
			V	C	units 11,12,23
			V	D	unit 10
			X	Vol. II	42
			XII		87-90
			XVII		31
			IV	3	82-84
ay=/ey/	7	85			
e=/e/	2	134	III	B	30,35,38,43-44,53
			III	C	20
			IV	A	17,18,151-60
			V	B	units 31,35,40,42,45
			V	C	units 7,9,10
			IV	B	36-42
			IV	3	27-32
			VIII	level 2	15,30,32
e=/iy/	6	115	III	B	30,35,38,43,53,46
			III	C	20
			IV	A	215-20
			XI		100-05
			IV	3	31-34
ea=/e/ (as in bread)	18	32	III	D	36
			IV	B	132,134-36,140-41
			IV	3	78,79,81
			V	C	units 11,12
			IX	level 4	52,58,63
			XII		80,81,86,89,90,127

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			XVII		54
ea=/ey/ (as in great)	20	8	III	B	20
	(20)	(11)	III	C	30
			III	D	36
			IV	B	132,134-36,140-42
			V	C	units 11,12
			IX	level 4	52,56,63
			XII		80,81,86,89,90,127
			XVII		54
ea=/iy/ (as in peach)	15	37	III	C	30
			III	D	36
			IV	B	80-81,86,89,90,132, 134-36
			V	B	unit 43
			V	D	unit 19
			IX		52,58,63
			XII		81,86,89,90
			XVII		53,54
ee=/iy/	13	37	IV	B	132,134,135,136
			V	B	unit 44
			IX	level 4	48,49,63
			XII		80
			XVII		50
			X	Vol. II	4
e+e=/iy/	11	40	X	Vol. II	1
			XVII		35-39
ei=/iy/	19	6	IV	3	82-84
			V	C	units 11,12
			XVII		19
final silent /e/	4	127			
i—without final silent e=/ay/	11	44	III	B	32,35,38,43,
	(11)	(45)	IV	A	175-190
			IV	B	45-46,50,51,54-55
			V	B	unit 34
			IX	level 4	18,22,25
			XI		88-91
			XII		27-29,39-41
			XVII		41
ie=/ay/	16	30	IV	B	133-36
	(16)	(45)	IV	3	78,79
			XII		81
			XVII		104,105
ie=/iy/	20	27	III	C	22
	(20)	(9)	IV	B	134-36,140-42
			V	C	units 11,12
			XII		81
			XVII		104,105
			XIX	level 6	17,24,27
i+e=/ay/	10	29	III	B	32,35,38,43,53
			IV	B	45-47,50,51,54,55
			IV	3	32-34
			VI	Green	3.5
			IX	level 4	18,22,25
			X	Vol. I	36
			XI		39,88-91,103-106
			XII		27-29
			XXII		63-65

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			XVII		35-39
			X	Vol. II	1
o=/a/	8	54	III	C	24
			IV	A	141-48
			IV	B	30-35,40-42
			IV	3	22-26
			V	C	unit 5
			XI		40,65-70
			XII		16,17,21,34,35, 39-41
o=/ə/	12	97	III	B	34,38,45,53
			IV	A	141-48,149,150
			IV	B	30-33,34,35,40,41,42
			XI		40,65-68,69,70
			XII		16,17,21,34,35
			IV	3	22-26,29,30,33,34
			XVII		29
o=/ɔh/	14	23	III	C	24
			IV	3	22-26,29-32
			V	C	unit 5
			XI		99,103,104,105
			XVII		3-5,29
o=/ow/	11	48	III	B	34,38,43,53
			IV	A	201-14
			IV	B	52-55
			V	B	units 39,41
			XI		97,98,99
			IX	level 4	28,34,47,40
			XII		33,34,35
			XVII		41,42
o=/uw/ (as in move)	15	5	III	C	24
			XVII		29
o+e=/ow/	10	110	III	B	34,38,43,53
			IV	B	52-55
			IV	3	31-34
			IX	level 4	28,34,37,40
			X	Vol. I	42
			XI		40,97-99,103-106
			XII		33-35
			VI	Green	3.5
			XVII		35-39,41,42
oi=/ɔɣ/	17	91	III	B	54
			IV	3	85
			V	C	units 11,12,22
			V	C	unit 11
			X	Vol. II	28
			XII		95,96,98,99,100,127
			XVII		32,33
oo=/u/	14	81	III	B	56-60,64
			IV	B	83-85,89,90,139 141,157-161
			V	C	unit 23
			XII		76,77
			XVII		32
			XIX	level 6	6
oo=/uw/ (as in room)	16	58	III	B	56-60,64
			IV	B	83,89,90,138,141, 157-161

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			V	C	unit 23
			X	Vol. II	17
			XVII		32
			XIX	level 6	6
ou=/ə/ (as in enough)	17	129	III	B	58
			IV	B	80,92,93,98-100, 147-49,157-61
			V	C	unit 22
			XII		80,92,93,98,99, 100,127
			XVII		33
ou=/ow/ (as in shoulder)	18	140	III	B	58
			III	C	32
			IV	B	147-49,157-61
			V	C	units 11,12,22
			XII		80,92,93,98,99, 100,127
			XVII		33,34
ou=/uw/	18	5	III	B	38
			III	C	32
			V	C	units 11,12,22
			XII		80,92,93,98,99, 100,127
			XVII		33,34
			XIX	level 6	6
oy=/ɔy/	12	30			
u=/u/	14	118	IV	3	19-21,24-26,29,30
			V	B	units 46,47
			XI		41,95,96,103-05
			XVII		3-5,43
u=/uw/	11	35			
u=/yuw/	11	40	III	B	36,38,43,53
	(11)	(90)	IV	A	191-99,200
			IV	B	48-51,54-55
			V	B	units 46,47
			IX	level 4	28,31,34,37,40
			XI		93,94,95,96
			XII		30-32,39-41
			XVII		41,43
ue=/uw/	11	24			
u+e=/uw/	11	2	III	B	36,38,43,53
			III	C	26
			VI	Green	3.5
			X	Vol. I	48
			IX	level 4	28,31,34,37,40
			XI		106
			XVII		36-39
u+e=/yuw/	11	6	(see references for u+e=/uw/)		
ui=/i/ (as in built)	20	5	V	C	units 11,12
	(20)	(12)	XVII		34
ui=/uw/ (as in fruit)	20	104	III	C	26
	(20)	(93)	V	C	units 11,12
			XVII		34
y=/ay/	6	66	III	A	46,48,49,59,62
			III	B	32,33,35,38,47, 50,59,61
			IV	A	43-46,102,105,106
			IV	3	4,35,36,37,38

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	Book	Page	Curriculum	Book	Page
			VII		2,9,10,39,45,46,47
			X	Vol. I	15
			XI		118
			XII		54,58
y=/i/ (as in mysterious)	19	24	III	D	32
	(19)	(54)	XIV		75
			XVII		9,10,39,45
final "y"=/iy/	9	51			
change y to ie+s=/ayz/	16	38	III	B	33,35,38,47
	(16)	(52)	V	C	unit 31
			V	D	unit 16
			VII	level 5	70,73,77,79
			XIX	level 6	3
			VI	Blue	2.6
			XVII		2,45
change y to ie+s=/iyz/	16	38			
	(16)	(52)			
Vowel–Consonant Combinations					
ain=/ən/ (as in mountain)	18	73			
	(18)	(75)			
alk=/ɔk/	7	45	III	B	52,59,60,64
	(7)	(46)			
all=/ɔl/	6	133	VII		27,28,57
ar=/ar/	6	86	III	B	48,51,59,60,64
			IV	A	231,232,237-39
			IV	B	70-71,74-75,78-80
					86-89,92-95
			V	C	unit 24
			V	D	unit 12
			VI	Gold	4.0
			VII		27,28,62-65,67,68
			IV	3	49,52,53
			XII		56,122,123
			X		30
			XIX	level 6	5
aw=/ɔh/	12	56	IV	B	143-46,157-61
			V	D	unit 10
			V	C	unit 23
			VI	Olive	2.3
			XVII		31
			XII		87,89,90,127
			XIX	level 6	14,23,26
			X	Vol. II	42
ay=/ey/	7	85	III	A	46,48
			IV	B	131,134,135,136
			VI	Olive	23
			IX	level 4	45,58,63
			VII		49
			XII		88
			X	Vol. 2	6
			XIV		238
			XVII	1	12
dge=/j/ (as in edge)	16	5	IV	B	68,69
			XVII		107
ear=/ar/ (as in heart)	20	90	III	B	48,51,59,60,
	(20)	(41)			40,64

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			III	C	20
			XVII		68
ear=/ehr/ (as in bear)	20	29			
ear=/er/ (as in learn)	18	101	XVII		68
	(18)	(98)			
ed=/d/ (as in begged)	4	70	For all the "ed" forms look in:		
			III	A	27,29,33,37,39,47, 49,59,64
			III	B	11,35,39,45,51
			III	D	30
ed=/id/ (as in handed)	4	109	IV	A	246
			IV	B	98-101,103-08,112, 121,122
			IV	3	58,61-65
			V	A	units 34,36
ed=/t/ (as in ripped)	4	66	V	B	units 11,12
			V	D	units 21,38-43
			VI	Gold	4.0,5.0
				Olive	4.5
				Green	3.5
				Blue	2.6
				Brown	3.0
			X	Vol. II	9
			XI		121,122,123
			XII		64,66,67,68,69
eigh=/ey/ (as in weight)	19	28	XVII		94
	(19)	(27)			
el=/əl/	10	84	XVII		57
	(10)	(86)			
en	2	99	III	B	35,37,39
			IV	3	69,70
			V	D	units 38-43
			VI	Green	5.0
				Olive	2.3
			XVII		78
er agent (helper, etc.)	5	73	III	B	21,25,27,45
			IV	B	116
			IV	3	59,61-68
			V	B	unit 50
			V	C	unit 25
			V	D	units 38-43
			VI	Gold	4.0,5.0
				Olive	4.5
				Green	3.5
			VII	level 5	67,76,68
			XIX	level 6	4,44,48,50
			XVII		39,57,58,59,60,68
			X	Vol. II	59
es nouns—verbs (dishes, catches)	5	27	IV	B	97,99-101,106-08, 112,118-22
			IV	3	61,62,71,72
			V	C	unit 29
			V	D	units 38,39,40,41,42,43
			VI	Gold	5.0
				Blue	2.6
				Brown	3.0

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			IX	level 4	15,64,65,67,79,82
			XII		63
			XVIII	1	16
est (as in biggest)	6	62	III	B	25,27,35,41,45,51,61
			IV	B	116,122
			IV	3	59,61-68
			XIX	level 6	44,48,50
et (as in jacket)	6	44	V	D	units 38-43
			VI	Green	3.5
				Olive	2.3
				Gold	5.0
			VII		109
ew=/uw/	14	10	IV	B	155,156,157-161
			X	Vol. II	43
			XVII		32
ew=/yuw/	14	13	(See ew=/uw/ above)		
gu=/g/ (as in guess)	20	15	XVII		100
ig=/ay/	12	16			
igh=/ay/	12	3	V	D	unit 19
			XVII		93-108
ing—present participle	1	54	III	A	19,27,31,37,39, 47,49,59,64
			III	B	35,39,43,49,51,57
			IV	A	247
			IV	B	96,100-02,104, 106-08,112
			IV	3	58,62-65
			V	A	units 30,31,32,34,35,36
			V	B	units 11,12
			V	D	units 15,38-43
			VI	Gold	4.0,5.0
				Olive	2.3,4.5
				Green	3.5
				Blue	2.6
				Brown	3.0
			VII	level 5	17
			IX	level 4	15,69,72,79,83
			X	Vol. II	26
			XI		119,120
			XII		62
			XIV		234
			XVII		24,38
ion=/yən/	15	46			
ious=/əəs/ (as in delicious)	18	124	XVII		91
ir=/ər/	6	25	III	B	48,51,59,60,64
			IV	A	231,232,238,239
			IV	B	70,71,74,75,90-95
			IV	3	50-53
			V	C	units 4,25
			V	D	unit 13
			VI	Gold	4.0
			XI		39,51-57,63,64,69,70
			XII		58-60,122,123
			X	Vol. II	32
			XIX	level 6	5
			VII		59,60

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	Book	Page	Curriculum	Book	Page
le=/əl/	8	126	IV	B	169,170,174,175
			V	D	units 33,34,38-43
			X	Vol. II	49
			XII		106,109,110
			XVII		39,57
oor=/ɔr/	9	7	VI	Gold	4.0
				Olive	4.5
or=/ɔr/	8	125	III	B	48,51,59,60,64
			III	C	34
			IV	A	141-48
			IV	B	88,89,92-95
			IV	3	49,52,53
			V	C	unit 24
			V	D	unit 12
			VI	Gold	4.0,5.0
				Olive	4.5
			X	Vol. II	29
			XII		57,122,123
			XVII		29,60,61,62
			XVIII	1	22,28,36
			XIX	level 6	5
ore=/ɔr/	8	133			
ough=/ow/ (as in although)	19	13			
ought=/ɔht/ (as in brought)	18	8	XVII		93
ould=/ud/ (as in should)	16	100	III	C	34
our=/ər/ (as in courteous)	18	27	XVII		65,66
our=/ɔr/ (as in pour)	18	4	XVII		65,66
ous=/əs/ (as in famous)	18	27			
ow=/aw/ (as in how)	15	2	III	B	56-60,64
			III	C	32
			IV	B	82,92-94,98-100, 147-50,157-61
			IV	3	78,79,86
			V	C	unit 22
			V	D	unit 11
			VI	Green	3.5
			X	Vol. II	33
			XII		82,92,93,94 98,99, 100,126,127
			XIII		78
			XVII		51
ow=/ow/	11	87	III	B	58
			III	C	32
			IV	B	137,141,142,147-50
			IV	3	78-79,83-84,86-88
			V	C	unit 22
			V	D	unit 11
			VI	Olive	2.3
			XII		82,92,93,94,98,99, 100,126,127
			X	Vol. II	33,48
			XVII		51,52

Reading Skill	Programmed Reading 3rd Edition*		Cross References		
	Book	Page	Curriculum	Book	Page
			XIX	level 6	6
oy=/ɔy/ (as in toy)	12	30	III	B	54
			IV	B	151-54,157-61
			IV	3	85,87,88
			V	C	unit 22
			V	D	unit 11
			XII		95,96,98,99,100,127
			XIII		79
			XIX	level 6	20,25,28
qu=/kw/	8	71	III	B	18,21,26,31,45
			IV	A	33,34,56,97,99,100
			IV	3	1,2,5-7
			VIII	level 2	24
			X	Vol. II	40
			XI		24
			XIII		66,67,69
			XVII		11,27,28,65, 75,76,100
sion=/ʒən/	17	129			
sure=/ʒər/	19	28			
	(19)	(27)			
tion=/ʃən/	15	16	V	D	unit 18
			VI	Green	5.0
			X	Vol. II	47
			XVII		96,97,98
ture=/ʧər/	15	1	XVII		90,103
ur=/ər/ and urr=/ər/	9	42	III	B	36,38,43,46,51,53, 59,60,64
			III	C	26,34
			IV	A	131-40
			IV	B	90-95
			IV	3	50-53
			V	C	unit 25
			V	D	unit 13
			VI	Gold	4.0
				Olive	4.5
			XII		58-60,122,123
			XIII		80
			X	Vol. II	32
			XIX	level 6	5
			XVIII	1	25,28,30
			XVII		59,60
wor=/wər/	13	30	XVII		62

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3 Singer Mathematics Program

by Annabelle Nelson
Karen Morton

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3

Singer Mathematics Program

by
Annabelle Nelson
Karen Morton

Structure of the Singer Series

The Singer *Sets and Numbers* math series consists of seven books beginning with the K Book and ending with Book 6 (see Figure 1). The books do not correspond to grade levels in Behavior Analysis classrooms since each child works at his own rate.

The Singer books are divided into chapters. Each chapter covers one math concept. At the end of each chapter, there is an in-book test, denoted by a colored stripe at the top of the page. The Singer books with soft covers are consumable; children can write their answers in the books. When working in the books with hard covers, children write their answers on a sheet of paper. Another feature of some books is a glossary which defines math terms for children to read and study. In addition to the math books, Singer publishes supplemental ditto masters and workbooks. The chart on the next page gives a summary description of the materials that are included in the series.

Teacher's manuals are also provided. As explained later, you will use the publisher's manuals primarily for a review of the concepts being taught in each chapter, and for specific directions and hints on the teaching of specific math concepts.

Figure 1

Description of Singer Books

Book K

Blue
78 pages
soft cover
no quizzes

Book 1

Tan
286 pages
soft cover
13 quizzes noted
by blue stripes
liquid duplicator
masters

Book 2

Yellow
318 pages
soft cover
20 quizzes noted
by blue stripes
liquid duplicator
masters

Book 3

Pink
311 pages
hard cover
15 quizzes noted
by red stripes and called
"Round-ups"
Glossary at end of book
Workbook

Book 4

Blue
342 pages
hard cover
22 quizzes noted
by blue stripes and called
"Countdowns"
Glossary at end of book
Workbook

Book 5

Orange
350 pages
hard cover
21 quizzes noted
by blue stripes and called
"Feedback"
Glossary at end of book
Workbook

Book 6

Green
331 pages
hard cover
24 quizzes noted
by blue stripes and called
"Checkout"
Glossary at end of book
Workbook

Placement

Steps to take:

1. If children entering your classroom in the fall were in a Behavior Analysis classroom last year, ask for your Staff Trainer's help in locating the last Weekly Individual Progress Report (WIPR) from the previous spring to give you a rough idea of where the child should be placed.
2. Give the last in-book test that comes before the child's placement as indicated by the WIPR. (For example, if the last year's WIPR indicates that Charles was in Book 1, page 218, the in-book test on page 202-203 should be given.)
3. Grade the test, and then use the handy table in Appendix A of this chapter to determine whether or not the child answered at least 80 percent of the questions correctly.
4. If the child gets at least 80 percent of the problems correct, give him the next in-book test. Continue this process until the child scores below 80 percent in a test. He should then be placed in the preceding chapter.
5. If the child does less than 80 percent of the problems correctly on that first test, give him the preceding test. (Charles would take the test on pages 184-185.) Continue testing in this manner until the child can do 80 percent of the problems correctly. Place him in the chapter following that test.
6. For children in your room who have not been in Follow Through previously, make a guess about where the child should be, and start the same procedure of giving the child in-book tests.

NOTE. When you ask a child to do an in-book test, be sure that he does it by himself, with no prompting from you or other students. Since the tests are your measure of the child's mastery of concepts, remember to help him only by explaining how he should respond to concepts.

How to Prepare to Teach Singer Math

1. At the beginning of the year, find each child's placement in the Teacher's Manuals, and read the Review of Concepts for all chapters in which your students are placed.

   NOTE. The Review of Concepts for each chapter is crucial for you as a math teacher. It will tell you the reason for the subsequent problems, how these problems relate to others that the children have worked, and it will define terms that you should be using as you explain problems. In short, these reviews put it all together for you as a math teacher.
2. To familiarize yourself with the math concepts taught in Books K-3, study carefully the complete Glossary which starts on page 349 of the children's Book 3.
3. Throughout the year, use this Glossary as a reference for math terms and concepts.
4. Turn to the Scope and Sequence Chart found in Appendix B of this chapter. This chart will explain what new terms you will need to know in order to teach each chapter, and which concepts taught previously are necessary to understand the new ones.
5. As the year progresses, you will keep abreast of the content of the books if you stay one chapter ahead of your most advanced student. Before this child is ready to start a new chapter, study the Review of Concepts in the Teacher's Manual for that chapter. When studying a review, always answer these questions:
   a. How do concepts in the upcoming chapter relate to previous concepts?
   b. How are the mathematical sentences (or equations) read?
   c. What should you stress about the new concepts?
   d. What new terms or symbols are introduced in this section?
6. After answering these questions, use the information you've learned to practice explaining problems. Incorporate the new terms or symbols in your explanations.
7. The boxed examples that occur on some pages can help with explanations. Read the boxed example and point out the new concept involved, and then have the child read it and begin to complete the first problem.
8. Another source of information for developing instructions are the directions and hints given in the Teacher's Manual for each page in the children's books. Although some of these items refer to group work, the activities can easily be incorporated into your individual instructions to a child.

How to Teach Singer Math in Behavior Analysis Classrooms

When you have prepared yourself well enough so that: (a) you are completely familiar with the concepts and terms that all of your children are working on, (b) you know how to use the Glossary in Book 3, the Reviews of Concepts in the Teacher's Manuals, and the Scope and Sequence Chart in Appendix B of this chapter, and (c) you know how to explain new problems, terms, and concepts, you are ready to use the Behavior Analysis procedures for teaching Singer math that are explained here.

1. Arrange desks in a tablelike fashion so that you can see all of the children all of the time.
2. Start working with the first child who is ready.
3. Ignore all off-task behavior.
4. Establish a pattern of making many, short contacts with children who are working.
5. Praise children as much as possible for their appropriate behavior. Vary your praise and make it specific to what the child has just done.
6. Give tokens for reading problems correctly, improvements in written accuracy, and working independently. And, of course, a token delivery should always be accompanied by specific praise telling the child what he has done to receive the token.
7. Make many, short **maintenance** contacts with children who are working independently. Be sure to make these contacts when you are engaged in a lengthy instructional contact by looking up and praising those children working. (This is why it is important to arrange your desks so you can see all the children all the time.) Another type of maintenance contact is to put a "C" by the last problem a student worked correctly, commenting, "Nice job, you added correctly there!"
8. Make **instructional** contacts to check a child's work. This can be done in two ways. One is to give a child an assignment and check his work when that assignment is completed. Another way is to check a child's work as he completes it, making brief contacts with children often and checking their work in short segments. This second way is probably more efficient, since it eliminates long checking contacts. It is very important to ask the children questions about what terms mean ("What does the union symbol tell you to do?"), how mathematical sentences are read ("Read this for me."), and how problems were worked ("How did you get this answer?"). Give tokens and praise for answering these questions correctly and for getting written answers correct. Require children to correct answers that are incorrect. As children get into Book 2 and above, you can have them use the Teacher's Manual to check their own work.
9. Make **trouble** contacts when a child raises his hand and says, "Teacher, I've got troubles." In these cases you will probably need to explain how to work a problem. Refer to the boxed examples in the book, if possible, and read through the problem. Be very careful to use praise when making trouble contacts. Most teachers do a great job of praising children during instructional and maintenance contacts, but when they are explaining problems, they often give a series of prompts ("Now add that column. Put your ones here. Now put your tens here," etc.) and leave a child without praising him once. Remember to praise whenever a child does something you've asked him to do, even if it's, "Go ahead and finish that page." As soon as the child starts finishing the page, say, "Good, you're getting started!"

How and When to Use Math Aids

1. For addition and subtraction problems in the first page of Book 1, an abacus or other counting device may be used.
2. a. When a child reaches Book 1, page 64, he should be taught the use of the number line for addition.
   b. When a child reaches Book 1, page 104, he should be taught the use of the number line for subtraction.

   Use the procedures outlined on the next few pages.*
3. Beginning with Book 2, teach the children to add and subtract basic facts (problems with one-digit answers) at an automatic level. This means that when a child says 2+3, he says 5 without pausing.

*We are indebted to Ms. Vivian Fueyo for developing these number line procedures for Book 1.

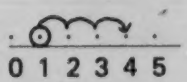
The best way to accomplish this is to give a child a sheet of simple addition problems, and time how long the child takes to complete them. The next day, give the sheet again and require him to complete it in less time than he took the day before. Continue until the child can add the facts automatically. This can also be done for subtraction and multiplication.

Number Line Procedures

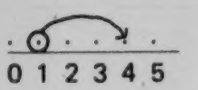
Simple Addition (1 + 3 = ____)

1. Ask the child, "What is the first number?" (In a problem like 1+3=____, the 1 is the first number.)
2. Tell the child, "The first number tells you **where to start.**"
3. Tell the child, "Put your pencil on the first number on the number line."
4. Tell the child, "The second number tells you **how many to jump.**" (In the problem 1+3=____, the second number is the 3.)
5. Ask the child, "How many do you jump?"
6. Tell the child to jump that number of steps (this should be the second number in the problem), one step at a time:

Like this:



Not like this:



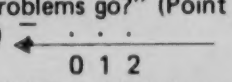
7. Ask the child, "What did you find?"
8. Tell the child to put that number (the answer) in the blank.
9. Be sure to praise the child and then have the child read the entire problem (1+3=4).

Missing Addend (1 + ____ = 5)

1. Ask the child, "Is the blank before or after the equal sign?" (A sample problem for this procedure would be 1+____=5.)
2. Tell the child, "If the blank is before the equal sign, it's a **tricky one.**"
3. Tell the child that for the tricky ones, the first number tells him **where to start.** (With this problem the 1 would be the first number.)
4. Ask the child, "Where do you start?"
5. Tell the child, "In tricky ones, this next number (the sum of the problem) tells you **what you're looking for.**" (In this problem the number would be the 5.)
6. Tell the child, "Let's find ____ (the sum)." (With this example the number would be the 5.) Count with the child as you jump one step at a time: "One, two, three, four jumps."
7. Ask the child, "How many jumps did you take to find the ____ (the sum)?"
8. Praise the child and say, "Put that number in the blank."
9. Prompt the child to read the entire problem (1+ 4 =5).

Subtraction (5 -1= ____)

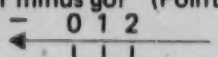
1. Ask the child, "What sign is this?" (With a problem such as 5-1=____, the sign is minus.)
2. Ask the child, "Which way does the arrow for minus problems go?" (Point out the arrow on the left end of the number line with the minus sign above it.)



3. Tell the child, "This number tells you where to start." (The child always starts with the first number—with this problem the first number would be the 5.)
4. Tell the child, "The next number tells you how many to minus." (With this problem the next number would be the 1.)
5. Ask the child, "Which way do you go when you minus?" (Have the child point in the direction.)

6. Praise the child. Tell the child, "You minus the second number from the first number. (With the example you would say to the child, "You minus the 1 from the 5.)
7. Prompt the child to read the entire problem (5-1=4).

Missing Subtrahend (5 – ___ = 4)

1. Ask the child, "What sign is this?" (With a problem such as 5-____=4, the sign would be minus.)
2. Ask the child, "Which way does the arrow for minus go?" (Point out the arrow on the left end of the number line with the minus sign above it.) 

3. Ask the child, "Is the blank before or after the equal sign?"
4. Tell the child, "If the blank is before the equal sign, it's a **tricky one.**"
5. Tell the child that for the tricky ones, the first number tells him **where to start.** (With this problem, the first number is 5.)
6. Ask the child, "Where do you start?"
7. Tell the child, "For the tricky ones, this next number (the remainder) tells you **what you are looking for.**" (In this problem the number would be the 4.)
8. Tell the child, "Let's find ____ (the remainder). Which way do you go when you minus?" (Have the child point in the direction.)
9. Ask the child, "How many jumps did you take to find ____ (the remainder)?"
10. Praise the child and say, "Put that number in the blank."
11. Prompt the child to read the entire problem (5-1=4).

Missing Minuend (____ - 1 = 4)

1. Tell the child that since the first number is missing and since it is a subtraction problem, this is a **special problem** (for example, ____-1=4).
2. Tell the child, "The first number tells you where to start." (In the problem ____-1=4, the number 1 is the first number.)
3. Tell the child, "The second number tells you how many to jump." (The 4.)
4. Tell the child to jump that number of steps, one at a time (to the right, rather than the left since this is a special problem).
5. Ask the child, "What did you find?"
6. Tell the child to put that number (the answer) in the blank.
7. Be sure to praise the child and then have him read the entire problem (5-1=4).

How and When to Use the Number Line with *Sets & Numbers, Book 1*

Page No.	Procedure No.	Instructions
11-19	1	Use the number line to help those children who do not have the number numeral correspondence. By showing those children who know how to count to start counting on the 1 of the number line, you can show the children how to find any number that they might not recognize. This procedure is also great practice for the children when they are trying to write their numbers.
22-27		Use the above procedure (1).
32-45		Use the above procedure (1).
46-51	2	Have the children match up the numbers in the book with those on the number line to help them find the numerals for the "before, after, and between" problems.
52-53		Use procedure 1.
63	3	Use the number line to provide models for the children to use while writing their numerals.
64-83	4	Use the procedures for Simple Addition.

Page No.	Procedure No.	Instructions
84-88	5	Use the procedures for Missing Addend.
89		Use procedures 4 and 5.
90-92		Use procedure 1.
93		Use procedures 4 and 5.
104-111 (column 1)	6	Use procedure for Subtraction. (Omit the use of the number line in the book for pages 108 and 109; simply do the problems.)
111 (column 2)		Use procedure 5.
112		Use procedure 6.
113		Use procedure 1.
115		Use procedures 4 and 6.
117-127		Use procedure 4.
128-131		Use procedure 4 and add this instruction: "This third numeral also tells you how many more to jump; you jump two times."
133-142		Use procedure 4.
143-144		Use procedure 5.
145		Use procedures 4 and 5.
146-147		Use procedure 4.
148-149		Use procedure 5.
150		Use procedure 2.
151		Use procedures 4, 5, and 6.
152		Use procedures 4 and 5.
153		Use procedures 4 and 6.
163		Use procedure 2.
171		Use procedures 4 and have the children add one column at a time with the procedure.
185		Use procedures 4, 5, and 6.
203		Use procedures 4, 5, and 6.
204-226		Use procedure 6. (Omit the use of the number line in the book on pages 208, 213, 218, and 223; do work all of the problems, however.)
229		Use procedures 4 and 6.
253		Use procedures 4, 5, 6, and 7.
	7	Use the procedure for Missing Subtrahend.
254-255		Use procedure 5.
256		Use procedure 6.
257 (column 1)		Use procedure 7.
257 (column 2)	8	Use the procedure for Missing Minuend.
260-263		First have the children add (or subtract) the numbers on the side of the equal sign without a blank. Then solve the problem using procedure 5.

How to Evaluate Student Progress

The in-book tests are indicators of the results of your teaching. If a child has finished a chapter and does 80 percent of the problems correctly, pat yourself on the back, and start the child working on the next chapter. If he does not have at least 80 percent correct, it's time to re-evaluate your teaching strategy and effectiveness with that child. Examine the test for a pattern of errors that will tell you what concepts the child needs extra work on.

As a math teacher, the last column of the weekly computer feedback reports is most important to your preparation. When you receive your feedback each week, figure out how many pages each child needs to do each day to be on target at the end of the week. If a child does not complete this number of pages during his first math period in the day, he goes to math again that day. This will require some careful planning with your teams concerning scheduling.

Remediation

If a child is not completing the targeted number of pages each day, schedule additional math time, and concentrate on increasing the child's rate of work.

If a child's tests and daily work are less than 80 percent correct, examine his work for patterns of errors, and then talk through the problem concepts with the child. If this doesn't solve the problem, give the child supplemental work. (This should be done in addition to the regular math period if possible.)

Sources and types of remediation materials:

1. Use ditto masters available for Books 1 and 2.
2. Workbooks are available for Books 3 and above.
3. *Group presentation.* If several children are requiring lengthy instruction on the same concepts, plan a group presentation that: (a) is brief, usually no longer than five minutes, and (b) allows each child to respond to each question or prompt. Although group presentations can be a big aid, use them cautiously since they can really cut into individual work time.
4. Appendix B: This Scope and Sequence Chart will help you locate materials to remediate a problem concept.
5. Appendix C: Also check this for suggestions on Supplemental Activities for individuals or groups in planning remediation.
6. Consult your Staff Trainer.
7. Develop your own material: See Appendix C for suggestions.

Appendix A

How to Determine 80 Percent Correct for Various Numbers of Problems

A child must get ___ out of ___ items correct on a test in order to pass.

6 out of 8	23 out of 29	39 out of 49	55 out of 69
7 out of 9	24 out of 30	40 out of 50	56 out of 70
8 out of 10	25 out of 31	41 out of 51	57 out of 71
9 out of 11	26 out of 32	42 out of 52	58 out of 72
10 out of 12	26 out of 33	42 out of 53	58 out of 73
10 out of 13	27 out of 34	43 out of 54	59 out of 74
11 out of 14	28 out of 35	44 out of 55	60 out of 75
12 out of 15	29 out of 36	45 out of 56	61 out of 76
13 out of 16	30 out of 37	46 out of 57	62 out of 77
14 out of 17	30 out of 38	46 out of 58	62 out of 78
14 out of 18	31 out of 39	47 out of 59	63 out of 79
15 out of 19	32 out of 40	48 out of 60	64 out of 80
16 out of 20	33 out of 41	49 out of 61	65 out of 81
17 out of 21	34 out of 42	50 out of 62	66 out of 82
18 out of 22	34 out of 43	50 out of 63	66 out of 83
18 out of 23	35 out of 44	51 out of 64	67 out of 84
19 out of 24	36 out of 45	52 out of 65	68 out of 85
20 out of 25	37 out of 46	53 out of 66	69 out of 86
21 out of 26	38 out of 47	54 out of 67	70 out of 87
22 out of 27	38 out of 48	54 out of 68	70 out of 88
22 out of 28			

Appendix B

Scope and Sequence Chart

Page of Summary in Teacher's Manual	Page in Child's Book That Summary Refers to	New Concepts and Vocabulary	Previous Concepts That are Applicable	Special Comments	New Concepts Not Contained in Teacher's Manual	Vocabulary That Teacher Should Know
Book 1						
1–2	1– 9	set equal sets (=) empty sets member of sets				
11–13	10–33	number property of sets (N) writing numbers sequencing number	set	not sufficient practice for writing or sequencing numbers		equivalent sets
33	34–53	before after between		41–42 (46–49) very difficult		
47	54–63	union of sets union symbol	set, members			disjoint sets, overlapping sets
56–57	64–93	adding numbers plus (+)	number property of sets union of sets	Difficult: missing addend using number line skip. 70–71 (80–81) jump from addition with sets to standard addition difficult.	64 (74) number line 70–71 (80–81) addition table 73 (84) missing addend.	commutative law, identity element for addition equation
79	94–101	difference of sets, minus (–)	set, member			
85	102–115	subtracting numbers	difference of sets number property	Difficult: using number line, jump from difference of sets to subtraction is difficult.	90 (108) number line	
97	116–153	adding 3 numbers	addition	T.M. says that child should have basic facts of addition at this point	116 (146) variable	associative law

Note: Page numbers in children's books appear in parentheses.

Page of Summary in Teacher's Manual	Page in Child's Book That Summary Refers to	New Concepts and Vocabulary	Previous Concepts That are Applicable	Special Comments	New Concepts Not Contained in Teacher's Manual	Vocabulary That Teacher Should Know
122–123	154–185	ones tens addition of numbers greater than 10	sets	difficult section	138 (169) written words	place value system
147	186-203	telling time recognizing coins counting money indicating order ordinal numbers write names of numbers		Hodge podge section: telling time is most important		ordinal cardinal
163	204-229		subtraction	T.M. says that child should have basic facts of subtraction at this point		
179	230-253	days of the week, inches, feet, dozen, 1/2 dozen, pints, quarts, calendar, measuring with ruler		Hodge podge section: ruler is most important.	194 (244) fractions	
203	254–267	variable equation problems like 2+3=4+_		Difficult		
216	268–286	point line segment closed figure circle triangle quadrilateral pentagon inside outside		Child is to read terms of shapes.		
Book 2						
T.M. 1–81 (1–97)		repetition of Book 1				
81	98–121	numbers 11–19 sums that add to and differences that use 11–19				
97	122–143	hundreds months days of the week	tens	skip 110–111 (140–141)		
113	144–151	subsets	sets, members			proper subset

Page of Summary in Teacher's Manual	Page in Child's Book That Summary Refers to	New Concepts and Vocabulary	Previous Concepts That are Applicable	Special Comments	New Concepts Not Contained in Teacher's Manual	Vocabulary That Teacher Should Know
119	152–169	less than	set, subset numbers property of set	123 (167) difficult, 128 (166) difficult		
131	170–187	addition with regrouping	tens and ones hundreds		136 (177) so–story problems	
142	188–207	convex concave				
156	208–221	subtraction with regrouping	tens and ones			
164	222–223	cup, $	regrouping concept used with dozens liquid measurement	hodge podge		
172	234–243	fractions one-half one-third one-fourth		difficult section	236	
179	244-253	finding sets	sets, members			
186	254–267	word problems thermometer Roman numerals	variable equation			
196	268–275	perimeter	line segment measuring	only one page on perimeter		
202	276–295	multiplication	sets N notation addition		207 (282) Line 213 (288) multiplication table	
218	296–303	area length width square inch rectangle	multiplication			
225	304–318	word problems	equation variable		(309) even, odd numbers	

Page of Summary in Teacher's Manual	Page in Child's Book That Summary Refers to	New Concepts and Vocabulary	Previous Concepts That are Applicable	Special Comments	New Concepts Not Contained in Teacher's Manual	Vocabulary That Teacher Should Know
Book 3						
T.M. 1–104 (1–97) repetition of Book 2					noteworthy concepts in this repetition 64–65 (60–61): even and odd numbers 96 (90) regrouping hundreds for subtraction 101 (95) dollars and cents	
104–105	98–103	lines of symmetry	line segment			
113	104–125	fractions: two-thirds, three-fourths, addition and subtraction of fractions				numerator denominator
137	126–135	mathematical sequences	equation variable		146 (134) 3-dimensional figure	
149	136–163	division	sets, members		158 (144) reversability of mult. & division 169 (155) use mult. table for division 173 (159) dividing one by a number skip 170 (156)	factors, product
179	164–177	thousands in regrouping with addition and subtraction	hundreds			
195	178–203	measuring	yards, miles, degrees, distances	hodge podge	skip 196 (178), 197 (179), 202–205 (184–187)	
223–225	204–217	describing sets	subsets, less than 7, greater than		192–201	
240–241	218–227	commutativ law unequal sign				binary operation

Page of Summary in Teacher's Manual	Page in Child's Book That Summary Refers to	New Concepts and Vocabulary	Previous Concepts That are Applicable	Special Comments	New Concepts Not Contained in Teacher's Manual	Vocabulary That Teacher Should Know
253	228–245	associative law				
273–275	246–263	point of intersection vertix (verticles)	line segment			
294	264–287	distributive law				
34	300–310	logic				

Appendix C

Suggestions for Supplemental Activities

Concept: Addition (Subtraction, Multiplication)
Objective: To add basic facts at an automatic level
Materials: Stop watch, Basic Facts Sheets as shown on page 44.
Instructions:

Day 1: "I am going to teach you to add sums without thinking. I want you to be able to say 2+3=5 without a pause. Please add this sheet of numbers. You can use your number line."

Day 2: "Yesterday you took _____ minutes to add these sums. Try to do it faster today." (Token if child does it faster.)

Day 3: Continue until child can add sums automatically. Use a similar procedure with subtraction and multiplication.

Concept: Matching
Objective: Match objects that go together. For example:
clock face and time,
number of objects and number,
addition problem and answer,
subtraction problem and answer,
multiplication problem and answer,
word "concave" and concave figure,
word "triangle" and triangular figure.

Activities:

1. *Sorting:* Given various pairs of cards, the child can match those that go together.
2. *Concentration:* The teacher puts all cards face down on table. Each child has a turn. He turns two cards over. If they match, he keeps the pair; if not, he turns them back over, and another child continues. Child with most pairs wins a prize.
3. *Teacher-child matching:* Teacher keeps one member of each pair, such as the answers to addition problems. She passes out other pair members to children. She shows her card, e.g., 5. Child with card that matches is to show his, e.g., 3+2. He is given the card with the answer. Child with most answers wins.
4. *Gin Rummy:* Shuffle and deal out all pairs. Object of game is to have all pairs in your hand. Children take one card from hand next to them, until some lucky winner has all pairs in his hand.
5. *Bingo:* One member of pair is on bingo card, teacher calls out other member.
6. *Worksheet:* Sheet with one pair-member on one side and other pair-member on the other. Child matches pairs with line.
7. *Foolers:* Each child has a card with YES on one side and NO on the other. Teacher puts pair on board. Child is to show yes or no depending if he thinks the pair is correct. Of course, teacher gets all excited if a student misses and says, "Ah, ha, I fooled you."

Concept: Missing Addend
Objective 1: If given a number of objects on one side of equal sign, child can make the other side equal by putting in the appropriate number of objects.
Materials: Objects (such as blocks) and an equal sign for each child.
Instructions: "What does an equal sign mean? Right, it means that both sides of the sign have the same things on them. How many do you have on this side? Right, 2. Now make the other side equal."

Objective 2: If given a number of objects on one side of an equal sign and a **different** number on the other side, the child can add to one side to make the numbers equal.

Instructions: (Review equal sign.) "We have a different number of things on each side of the equal sign. Can you make them equal? How many did you have to add here?"

Objective 3: Same as 2, but the child also writes how many he adds to make the sides equal. Also, child reads the question.

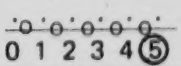
Concept: Addition
Objective: Use number line to add.
Materials: Sheets with additional problems and number lines.
Instructions: Explain to the children that they are going to learn to add the easy way.

1. Review how to add with objects.
2. Give child the number line. Ask child to put number of things of first number on line and then number of things of second number. Then show him the answer. Point out that this is easier because you don't have to recount to find answer.
3. Explain that you are going to make it even easier. You don't have to put the first number of things on line. Just find that number. Then put number of objects second number tells us.
4. Then have the child take the pencil and jump over the objects.
5. Then say: "It's easier. Find the first number on a line, then jump with the pencil the number of times of the second number. You don't even need objects."

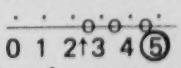
Examples:

1. Use of objects.
   2 + 3 = 5 00 + 000 = 5

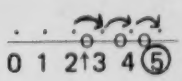
2. Use objects on number line.
   2 + 3 = 5



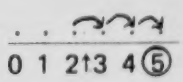
3. Find first number on number line and then use objects for next number.
   2 + 3 = 5



4. Find first number on number line, use object for next number and jump with pencil.
   2 + 3 = 5



5. Have child jump with pencil.
   2 + 3 = 5



If you are making up your own supplemental materials, use this outline:

1. Objective (what do you want child to do?).
2. Materials (attach sample).
3. Sequence of Steps and Instructions (start with simple and move to complex).
4. Is this for a group? If so, how will you ensure that each child can respond at the same time? Can this activity be used as a back-up?

Sample Basic Facts Sheet

Name: _____

Date: _____

Time to complete: _____ Yesterday's time: _____

Accuracy: _____

2 +3	4 +5	6 +2	5 +7	3 +4
1 +0	1 +6	6 +4	3 +7	8 +2
6 +5	4 +2	7 +4	5 +2	9 +5
9 +6	7 +6	8 +4	5 +8	3 +6
9 +4	8 +7	4 +4	7 +7	6 +8

4 SRA Reading Laboratory Series

by Rex Stonger
Jill Becker
Annabelle Nelson
Laura Hernandez

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The Student Record Book 4–1
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4

SRA Reading Laboratory Series

by
Rex Stonger
Jill Becker
Annabelle Nelson
Laura Hernandez

Materials

The Teacher's Handbook

The Teacher's Handbook contains helpful information and suggestions. However, many of the procedures in it are not appropriate to the completely individualized procedures of a Behavior Analysis classroom. You will want to use the Handbook mainly as a source of ideas, for placement information, and to refer to the Skills Chart found in the appendices. This manual will tell you what specific parts of the Handbook to use.

The Student Record Book

The Student Record Book contains items that the student will find useful as progress is made through the materials. On the front cover are charts where the student can mark his progress on Power Builders and (for series II and III) Rate Builders. The book has record pages for Power Builder Starters, Power Builders, Rate Builders, and Skill Builders. Instruction on how to work exercises, practice work pages, and grammar rules are also incorporated in the books for some series. Have your students use these materials when they will be functional in your classroom. Also, you may want to use the SRA Student Performance Record (Appendix) to keep a daily record of each student's progress. See the instructions in the Appendix for the use of this form.

Power Builders

The Power Builders are short reading selections on the child's interest level, presented with a picture and followed by a set of exercises. Each Power Builder is divided as follows:

1. A picture and a story (with numbered paragraphs).
2. A "How Well Did You Read?" section, consisting of comprehension questions. The questions are grouped under subheadings that indicate in which story paragraph the answer can be found.
3. A "Learn About Words" section that develops language skills.
4. A "What's Your Story?" section, containing a suggestion or question related to the Power Builder selection the student has just read. (This section will be used only occasionally.)

Each Power Builder has a Power Builder Key Card which contains the correct answers for the exercises so the student can correct his own work as soon as he finishes it.

The Power Builders in each of the six SRA kits are divided into approximately 15 different colors, which indicate different levels of difficulty. The Power Builders of a given color do not follow any particular order except that the skill content (i.e., the skills taught and tested) is repeated every fifth Power Builder within a color level. For example, the same skills are presented in Power Builders No. 1, No. 6, and No. 11. Use the Skills Chart in the Teacher's Handbook to determine what skills are taught in each Power Builder. The chart will help you to determine the appropriate Power Builder to use for remediating or strengthening specific skills, and it will help to prevent a child from repeating exercises on skills he already knows. If you follow the procedures given in the Appendix for the use of the SRA Student Performance Record, remediation will automatically be part of the learning sequence.

Rate Builders

Rate Builders are short reading segments that are to be read within a three-minute period. The child answers comprehension questions over each of these reading selections. *NOTE:* **Rate Builders** should be read only if a child is taking longer than an hour to complete the Power Builders (see Power Builder Corrective Procedures, page 49).

The Rate Builder Key Booklets have the correct answers to the comprehension checks for each Rate Builder so the student can correct his own work.

Placement

A pupil may begin working in SRA when he is in *Programmed Reading*, Book 12 and on target in both reading and math. Placement in SRA is not mandatory upon entering Book 12; this is just the earliest reasonable time to begin. The pupil's privilege of working in the SRA material is contingent on his ability to stay on target in reading and math. If in any given week a child fails to meet his math target, he works on math during the time he would have been working on SRA until he is back on target for math.

The first exposure that a child will have with the *SRA Reading Laboratory* will be the placement selections. To place a child, use the following procedures:

1. Choose the correct *SRA Reading Laboratory*, based on the child's reading achievement. A child who is working in *Programmed Reading, Books 12-17* should be placed in *Reading Laboratory Ia, Ib, or Ic*. A child who is working in *Programmed Reading, Books 18-22* should be placed in *Reading Laboratory IIa, IIb, or IIc*. For placement purposes, start testing the child in the lowest appropriate kit available.
2. Find the Teacher's Handbook for the kit you will be using and read the section that gives the specific placement procedures to follow with that kit.
   a. For kits Ia, Ib, and Ic, review the section called "Introducing the Power Builder Starters" in the section on The Power Builder Program.
   b. For kits IIa, IIb, and IIc, read the placement procedures given under the heading, "First Week: Monday (Administer the Starting Level Guide)."
3. a. For Ia, Ib, or Ic, pick out the first Power Builder Starter in the child's copy of *My Own Book For Reading* that you will have him do. (The Teacher's Handbook has a reading level chart under Section IV, The Power Builder Program, that might help you make this choice.)
   b. For kits IIa, IIb, or IIc, remove the Starting Level Guide from the center of each child's Student Record Book.
4. Before administering the placement selection, go over the questions that are being asked with the child. This will prevent errors being made from misinterpretation of the questions.
5. Have the student read the placement selection and answer the questions.
6. a. For kits Ia, Ib, or Ic, use the Starter Key (page 83 in *My Own Book For Reading*) to determine how well the child did. If the child could answer eight out of ten questions correctly, **and** if he could read 90 percent of the words in the story without substitutions, omissions, additions, or other errors, **and** if his reading was smooth (he stops at periods, pauses at commas, etc.), the placement is probably correct. If he has difficulty, have him read to you from a Power Builder

Starter of the preceding color. Continue this procedure, using as many Starters and as many sessions as necessary, until you have found a level where the child can read with success.

b. For Kits IIa, IIb, or IIc, correct the child's Starting Level Guide by using the key on the inside back cover of the Teacher's Handbook, and then use the Placement Chart on page 15 to determine the child's starting color level.

7. Have the child read to you from a Power Builder of the color level indicated. If he can read 90 percent of the words without substitutions, omissions, additions, or other errors, and if his reading is smooth (he stops at periods, pauses at commas, etc.), the placement is probably correct. If he has difficulty, have him read from a Power Builder of the preceding color. Continue this process until you have found a level where the student can read with success.
8. If the lowest level in a kit is too difficult, go to the preceding kit in the sequence and administer the starter selection. If this is not an option, have the child remain in *Programmed Reading* (and supplement as indicated in *Chapters 1 and 2)* until he is working at a level which enables you to place him successfully.

Summary

When to Place

1. Any time after a child begins working Book 12.
2. When the child is on target in reading and math.

Where to Place

1. A child in *Programmed Reading, Books 12-17* is tested in kit Ia, Ib, or Ic.
2. A child in *Programmed Reading, Books 18-22* is tested in kit IIa, IIb, or IIc.

How to Place

1. Have the child do the placement selection as indicated in the Teacher's Handbook.
2. Have the pupil read to you from the Power Builder color indicated by the placement test. If the child reads at least eight out of every ten words correctly, and reads smoothly, the placement is probably accurate. If oral reading is not this adequate, try the preceding Power Builder color.
3. Place student where his reading meets the criteria as stated above, and SRA requirements (see Handbook) for placement have been met.

Starting Procedures

In addition to being used for placement in kits Ia, Ib, and Ic, Power Builder Starters are used to teach the appropriate procedures for working Power Builders. Use the Power Builder Starters with children who: (a) have never worked in an *SRA Reading Laboratory* before, or (b) have worked in SRA but did not do the first Power Builder procedures correctly.

If a child has had previous experience in an *SRA Reading Laboratory* and has worked one Power Builder successfully, the child can begin working immediately in Power Builders.

Power Builder Starter Procedures

1. Once you have determined the level at which the child can work successfully, give him the appropriate Student Record Book or *My Own Book For Reading* and have him fill in the information on the cover.
2. Have the child read the appropriate Power Builder Starter.
3. When he is done, help him as he works the "How Well Did You Read?" and "Learn About Words" questions.
4. Tell the child that it is desirable to look back at the story to help find the correct response.

5. Then ask the child to turn to the record page and write the correct letters on the lines.
6. So that you can keep track of errors, we suggest that you tell the student that when he is recording responses he should never erase his work. To change an answer he should draw an "X" through it and write the new answer beside it.
7. When the exercises are completed, have the child check his answers with the Power Builder Starter Key in his Student Record Book.
8. After the child has completed the starter, review the Power Builder instructions with him.
9. Turn to the first record page in the Student's Record Book and go over the headings and where to place the answers. (The Teacher's Handbook has some helpful ways of doing this.)
10. Explain to the child that he will check his own work with the Power Builder Key Cards and calculate the percentage correct using the conversion table at the back of his book.
11. Next, explain the Power Builder Progress Chart on the inside flap at the back of his book. After the student has computed his percentage correct, he records it on this chart.

Power Builders Lesson Procedures

Contacting a Child Who is Reading

1. Ask the child to read orally a section of the material that you specify.
2. Praise word pronunciation and sentence-reading fluency.
3. Two types of questions can be asked about **new words** encountered in the oral reading selection as follows:
   a. "How do you say this word?", and,
   b. "What is the meaning of this word?"

Contacting a Child Working on the Response Items

1. Ask the child to read aloud from the questions that he is answering.
2. If the child has difficulty responding correctly, have him read the instructions out loud, and then help him work an example.

Contacting a Child Using Key Cards

1. If the child's answers are 85 percent or more correct, provide lots of praise and approval for his good work.
2. If the answers are less than 85 percent correct, take the opportunity to work with the child to correct his errors. (Remember to use the Skills Chart in the Teacher's Handbook to help you determine what Power Builders a child should work on to strengthen or remediate skills.)

Power Builders Corrective Procedures

Comprehension

If a child makes errors on the questions from a Power Builder story, the child should: (a) find the section in the story that provides the correct answer, (b) read the section aloud to the teacher, and then, (c) write the correct answer.

Word-Attack

If errors are made on items dealing with word-attack skills, work with the child on learning the word and words that follow similar rules of phonetics and pronunciation, and have the child work another Power Builder in the same sequence (see Appendix).

Reading Rate

1. If an individual child does not complete a Power Builder (reading the story and answering questions) within an hour of working time, he should work a Rate Builder. *NOTE:* The 60 minutes of working time can be from any number of consecutive earn periods; the 60 minutes does **not** include the time taken to score and to correct the work.)
2. The child should work **one** Rate Builder at a time.
3. Explain that Rate Builders are color-coded just like Power Builders.
4. Have the child fill in the information required on the Rate Builder Record Page which is found near the back of the book.
5. Explain that he will have exactly three minutes to read the story and answer the comprehension questions.
6. When the child is finished, he: (a) looks in the Rate Builder Key Booklet, (b) scores his work, (c) calculates his percentage correct, and (d) graphs the percentage on the Rate Builder Progress Chart on the inside front cover.
7. After a Rate Builder has been completed, the child should work on the next Power Builder in that color level.

Back-up Procedures: The Listening Skill Builders

The final component of the *SRA Reading Laboratory* is the Listening Skill Builder. In the Behavior Analysis model classroom, the Listening Skill Builders are used as excellent, educationally enjoyable exchange activities, and not as part of regular reading instruction.

1. If you are not familiar with the use of Listening Skill Builders, find the section in your Teacher's Handbook that introduces them, and read it over.
2. Review the TQLR procedure. It can be used just as it is described in the Handbook.
3. To use a Listening Skill Builder as a back-up activity, place **Listening** or some similar heading on your exchange menu. Indicate by name the adult who will be involved in the activity.
4. Choose a Listening Skill Builder that corresponds to the lowest placement held by any of the children exchanging for listening activities.
5. Now that you have insured the essential procedures, go beyond! Inject drama into your reading of the material. Have fun with these activities!
6. When the session is over, have the children answer the accompanying questions, and then have each child graph his score.

Notes to the Staff Trainer

1. The best way for you to keep abreast of progress in the *SRA Reading Laboratory* materials is to monitor the graphs. Check percentage correct and rate of progress on the Power Builder and Rate Builder charts (front and back covers). Occasionally you should spot-check a child's work by having him read to you. When you do this, listen for correct pronunciation and prompt for comprehension?
2. Listen to the kinds of prompts the teacher gives. Is he checking for pronunciation **and** comprehension?
3. If a child is moving slowly through the Power Builders (over one hour for one Power Builder) is he doing Rate Builders?

Appendix

The SRA Student Performance Record

The attached form is designed to be used as an answer sheet for Power Builders in place of the Student Response Book or response sheets published by SRA. The advantages of this form are that it provides a systematic way of sampling a child's oral reading, and, more importantly, it enables a teacher to sequence a child's progress through a Power Builder color to remediate low accuracy.

This remedial action is accomplished by dividing a child's performance on a Power Builder into four components—oral reading, comprehension, vocabulary, and skills. (The skills section is not used for Kits Ia, Ib, or Ic.) Although this explanation is fairly lengthy, the form is quite clear and can easily be used by teachers and children.

Oral Reading

When a child raises his hand after completing his reading of a Power Builder selection, the teacher asks him to read a paragraph. In the Oral Reading section of the Student Performance Record, the teacher (or the child) records the number of the paragraph read. Then the student writes in any words that he missed under "Words Missed." (These words can be used as the basis for a tutoring sequence if oral accuracy is consistently low.) The child then counts the number of words read and the number of words correct and calculates the percent correct. (A division table [see page 54], a calculator, or a slide rule the teacher operates will expedite this.)

The last part under Oral Reading (and also the other four sections of the form) is "Questions Asked." Use this to make a tally of the number of times that the child asks for help. This information can be helpful to see if a child is misplaced, having trouble with a particular concept or skill, or is simply gaining attention by asking a lot of questions.

Comprehension

This section of the form corresponds to "How Well Did You Read?" Here the child writes his answers, checks his work, counts number done and number correct, and figures the percentage correct. If there are fewer than ten comprehension questions, cross out the extra response blanks in this part of the form. This will prevent children from putting answers to the vocabulary section here.

Vocabulary

This section refers to the questions in parts A and B directly under "Learn About Words" on the second page of the Power Builder (**not** those on the back or third page of the Power Builder). Again the child uses the spaces provided to record his answers, and to record the number correct, the number completed, and the percentage correct. In the "Words Missed" section, record vocabulary words that the child could not find in the story. (These words can be used by having the child look them up in the dictionary if vocabulary accuracy is consistently low.)

Skills

This section refers to the questions in parts C, D, and E on the back page of the Power Builder. (Omit the Skills section when using Kits Ia, Ib, or Ic.) Use the same procedure here as was used in the other sections. Note that the numbers on the Power Builders will not be the same as the numbers on the performance record. However, the one's place is the same. Eleven goes with one, twelve goes with two, and so on.

How to Use the Accuracy Percentages as Prescriptions

When a child completes a Power Builder and computes accuracy percentages on each of the four conponents, the teacher can use these percentages prescriptively to assign a child to his next Power Builder.* This is done by referring to the number at the far left-hand side of the form. The Power Builders of a given color fall into five groups—every sixth Power Builder repeats the same skills. Thus, 1, 6, and 11 fall in one group, 2, 7, and 12 fall in the next group, and so on.

This information is used in the following way. If a child falls below 80 percent on any component, he does that component again in the next Power Builder in that group. If he gets 80 percent or over on all components, he can go on to the first Power Builder of the next group. The bottom section of the form lets the teacher note what Power Builder to do next and what components of that Power Builder to complete.

For example, when Tonia Sweet completed Power Builder 1, she made 83 percent on oral reading, 89 percent on comprehension, 71 percent on vocabulary, and 60 percent on skills. She then read Power Builder 6 and did vocabulary and skills. If Tonia achieved over 80 percent accuracy on vocabulary and skills on number 6, she would go on to the first Power Builder of the next group (number 2).

However, if Tonia only made 72 percent on skills, she would do the skills component of Power Builder number 11. The last two Power Builders of a group are thus remedial for the first, and are only read if and when a child needs the extra practice. It may happen that a child will do all three Power Builders in a group and still not achieve the required accuracy on a given component. If this happens, the child repeats the unsatisfactory components using any of the Power Builders in that group.

**Note:* Whenever extra practice seems desirable, teachers may want to assign *all* Power Builders, rather than using them as described here.

SRA Student Performance Record

Name _____ Date _____ Time begin _____ Time end _____ Minutes _____

Lab Number _____ _____ _____ _____ _____

Color _____ _____ _____ _____ _____

Power Builder Number _____ Total Minutes _____

Power Builder Sequence	Oral Reading	Comprehension	Vocabulary	Skills
	Number of paragraph read _____	1 _____	1 _____ 6 _____	1 _____ 12 _____
		2 _____	2 _____ 7 _____	2 _____ 13 _____
1	Words missed:	3 _____	3 _____ 3 _____	2 _____ 14 _____
6		4 _____	4 _____ 9 _____	4 _____ 15 _____
11		5 _____	5 _____ 10 _____	5 _____ 16 _____
2		6 _____	Words missed:	6 _____ 17 _____
7		7 _____		7 _____ 18 _____
12		8 _____		8 _____ 19 _____
3		9 _____		9 _____ 20 _____
8		10 _____		10 _____ 21 _____
13				11 _____ 22 _____
4				23 _____
9	Words correct: _____	No. correct: _____	No. correct: _____	No. correct: _____
14	Words read: _____	No. done: _____	No. done: _____	No. done: _____
5 10	Percent correct: _____	Percent correct: _____	Percent correct: _____	Percent correct: _____
15	Questions asked: _____	Questions asked: _____	Questions asked: _____	Questions asked: _____

4–8

57

Next power Builder: Color _____ **Number** _____

Circle what to do: oral reading comprehension vocabulary skills

58

Table of Percent Correct

Number Correct

Number of Words or Items	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1	6	6	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3
2	12	11	11	10	10	9	9	8	8	8	7	7	7	7	6	6	6	6	6
3	18	17	16	15	14	14	13	13	12	12	11	11	10	10	10	9	9	9	9
4	24	22	21	20	19	18	17	17	16	15	15	14	14	13	13	12	12	12	11
5	29	28	26	25	24	23	22	21	20	19	19	18	17	17	16	16	15	15	14
6	35	33	32	30	29	27	26	25	24	23	22	21	21	20	19	19	18	18	17
7	41	39	37	35	33	32	30	29	28	27	26	25	24	23	23	22	21	21	20
8	47	44	42	40	38	36	35	33	32	31	30	29	28	27	26	25	24	24	23
9	53	50	47	45	43	41	39	38	36	35	33	32	31	30	29	28	27	26	26
10	59	56	53	50	48	45	43	42	40	38	37	36	34	33	32	31	30	29	29
11	65	61	58	55	52	50	48	46	44	42	41	39	38	37	35	34	33	32	31
12	71	67	63	60	57	55	52	50	48	46	44	43	41	40	39	38	36	35	34
13	76	72	68	65	62	59	57	54	52	50	48	46	45	43	42	41	39	38	37
14	82	78	74	70	67	64	61	58	56	54	52	50	48	47	45	44	42	41	40
15	88	83	78	75	71	68	65	62	60	58	56	54	52	50	48	47	45	44	43
16	94	89	84	80	76	73	70	67	64	62	59	57	55	53	52	50	48	47	45
17	100	94	89	85	81	77	74	71	68	65	63	61	59	57	55	53	52	50	49
18		100	95	90	86	82	78	75	72	69	67	64	62	60	58	56	55	53	51
19			100	95	90	86	83	79	76	73	70	68	66	63	61	59	58	56	55
20				100	95	91	87	83	80	77	74	71	69	67	65	62	61	59	58
21					100	95	91	87	84	81	78	75	72	70	68	66	64	62	60
22						100	96	92	88	85	81	79	76	73	71	69	67	65	63
23							100	96	92	88	85	82	79	77	74	72	70	68	66
24								100	96	92	89	86	83	80	77	75	73	71	69
25									100	96	93	89	86	83	81	78	76	74	71
26										100	96	93	90	87	84	81	79	76	74
27											100	96	93	90	87	84	82	79	77
28												100	97	93	90	88	85	82	80
29													100	97	94	91	88	85	83
30														100	97	94	91	88	86
31															100	97	94	91	89
32																100	97	94	91
33																	100	97	94
34																		100	97
35																			100

5 Handwriting

by Rex Stonger
Lynn Weis
Tom Brigham
Martha K. Breunig
Nancy Krompotich

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5

Handwriting

by
Rex Stonger
Lynn Weis
Tom Brigham
Martha K. Breunig
Nancy Krompotich

This teaching guide explains all of the procedures that are used with the *Behavior Analysis Handwriting Primer*.* Study this manual carefully before you start to teach. Review it often, and you will be rewarded by children who are successful handwriters.

In addition to being a guide to the use of the *Primer*, the manual describes teaching strategies that should be used when teaching with *Write and See* or *Kittle's Penmanship*.

The development of handwriting skill follows three steps: tracing, copying, and independent handwriting. In tracing, the child marks on top of an item already printed in a book or on a ditto sheet. In copying, the child traces a sample item or letter, and then makes his own letter just like the sample. Independent handwriting is most important and is what the child should be able to do at the end of the entire handwriting program. A child can write independently when he is able to make a letter, word, or sentence correctly without having any examples to look at.

In Behavior Analysis classes, we first use the *Behavior Analysis Handwriting Primer*. All entering kindergarten children will begin learning handwriting by using the *Primer*. The *Primer* teaches children to trace. After a child completes the *Primer*, he moves into more advanced material. Mid-year kindergartners, first, second, and third grade students use *Write and See* (Lyons and Carnahan), or *Kittle's Penmanship* (American Book Company). These series will teach children to copy and then to begin writing independently.

The Behavior Analysis Handwriting Primer
Purpose and Content

The purpose of the *Behavior Analysis Handwriting Primer* is to teach basic skills that a child can later use in learning to form letters. These skills include tracing straight and curved lines, marking within guidelines, and tracing letters, as well as the skills described by the Five Golden Rules of Handwriting (see page 60). The *Primer* works on the same principle as priming a pump—you give the child a little bit to get him started. The *Primer* then allows the child to get a start on the beginning skills that are needed later to form letters.

*Based on the original work reported in Miller, L. Keith, and Schneider, Richard, "The use of a token system in project Head Start," *Journal of Applied Behavior Analysis*, 1970, 3, 213-220.

The 29 levels in the *Primer* are printed as a series of ditto sheets. All the levels are numbered, and they become more difficult as they go along. For example, Level 29 would be harder than Level 16. In this way, the child learns one skill at a time, and then uses that skill to learn a new one, much as blocks are stacked one upon another.

Directions for the teacher are written on each one of the levels. These directions briefly describe the responses that the child is supposed to make on that page, and tell the teacher what to look for in a correct response. These will come in handy, since different children will be working in different places in the *Primer*. You can also use these descriptions for scoring.

The Pretest

A few children, when they enter kindergarten, may already be able to draw straight or curved lines, and even know how to trace letters. A few other children will not even know how to hold a pencil. The *Primer* Pretest was developed to help determine what each child already knows, and where he should begin working in the handwriting program. By looking at the results of the Pretest, you, as the teacher, can place a child in the materials where he can use what he does know to begin learning what he does not know.

Content of the Pretest

The Pretest is five pages long, with four rows of items on each page. On the first four pages of the Pretest, there are sixteen (16) items drawn from different levels of difficulty in the *Behavior Analysis Handwriting Primer*. These items test tracing skills. Page 5 tests the child's ability to copy letters.

Who Should Take the Pretest

Kindergartners. Give the Pretest to all entering Kindergarten children and all children transferring into your Kindergarten class during the year.

Children with Behavior Analysis experience. Check with your Staff Trainer for placement information from the Weekly Individual Progress Report (WIPR) for last year for any child coming to you from another Behavior Analysis classroom in your district. Verify this placement by giving the child work at the level indicated. If the child gets more than 75 percent correct, try him at the next higher level. If he gets less than 75 percent correct, try him at the next lowest level.

Transfer Students. Give page 5 of the Pretest to all children who are starting their Behavior Analysis experience in first grade, or who transfer into your first grade during the year. If 75 percent (12 out of 16) are correct, place in *Write and See* or *Kittle's Penmanship*. If 75 percent are not correct, give pages 1-4 of the Pretest, and place in the *Primer*.

Administering the Pretest

The Pretest for handwriting should be administered to all of the children on the same day.

Before you give the test:

1. Collect the materials you will need: Pretest copies, dittoed and stapled into packets, and pencils sharpened.
2. Enter the date the test is being given, and the child's full name on the upper left-hand corner of the test.

When you are ready to give the test:

1. Gather not more than six children together.
2. Be relaxed. If you make the Pretest like a game, you can be sure that the child's responses are a good indication of his abilities. Do not mention the word "test" when you give instructions to the children.
3. Give an introductory comment to the children. Although your statement does not have to follow this suggestion word-for-word, you might say: "I want you to make some lines for me. Be sure to make only one row at a time. When you have finished each row, put your pencil down and raise your hand. Everyone who is listening raise your hand. Good. Now, are you ready to start?"

4. Demonstrate each item on each child's page as you repeat the instructions. On some rows it may be necessary to demonstrate more. It might even be necessary to interrupt a child to explain the instructions again.
5. Wait until all of the children are through with the first row before going to the next. Remind the children to put their pencils on the table and raise their hands when they finish a row.
6. On the last copying page of the Pretest, tell the children to look at the letters on the page and make one just like it in the blank space next to the letter.

During the test:

1. You may give tokens and praise during the Pretest, but **only** for working and for following the rules. Do **not** praise or grade any of the children's actual writing responses during the Pretest.
2. Make sure the children trace the entire response. If they are stopping short, tell them to finish the line. Demonstrate the response on their page to start them going.
3. The *Primer* instructions tell you that the children must work from left to the right. Many of the children will not know left from right when they take the Pretest, so ignore the left-to-right rule for now. Grade only the accuracy of their tracing.

Scoring and Placement

After the test:

1. Score each Pretest using the scoring examples on pages 59 and 60.
2. Determine each child's placement using the following procedures:

Find the description in the left column that fits the types of errors made by the child; then follow the arrow to the right to find the correct placement.

One error or less on **each** level. →	Place in Book 1 of *Write and See* or *Kittle*.
Two or more errors on any of the tracing levels (on pages 1-4 of Pretest), **but** at least 75% (12 out of 16) correct on page 5 of the Pretest (copying). →	Place in Book 1 of *Write and See* or *Kittle*.
Two or more errors on two consecutive levels (for example, child misses two items on Level 7, two on Level 8, and one on Level 9), **and** also less than 12 correct on page 5 of Pretest.* →	Place in *Handwriting Primer*, one level lower than first level on Pretest with two or more errors. (In example, placement is Level 6.)

*In some cases, a child's responses on page 1 might be extremely poor—less than 4/5 correct—while his responses on page 2 might be excellent. If so, ignore the first page and place him on the appropriate level indicated on page 2. The reason for this is that some children with good tracing ability "play" with the first page. Others simply may have misunderstood the instructions.

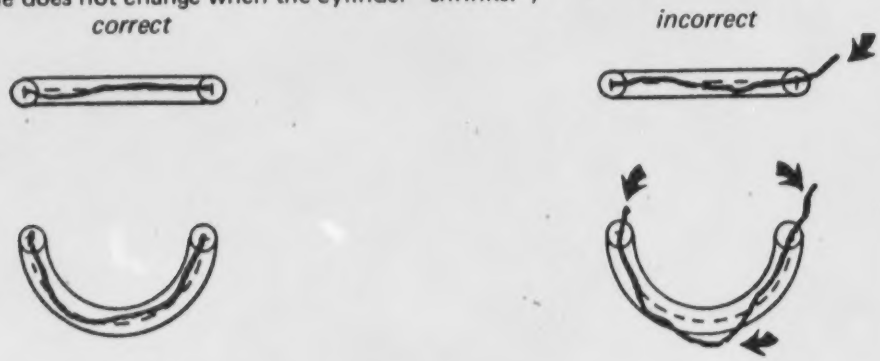
Scoring Examples for the Behavior Analysis Primer & Pretest

The following examples show you how to score children's work in the *Behavior Analysis Handwriting Primer* and Handwriting Pretest.

Circle-To-Circle Cylinders

The child's pencil line cannot go beyond the circle at either end and must stay between the margin lines. (The rule does not change when the cylinder "shrinks.")

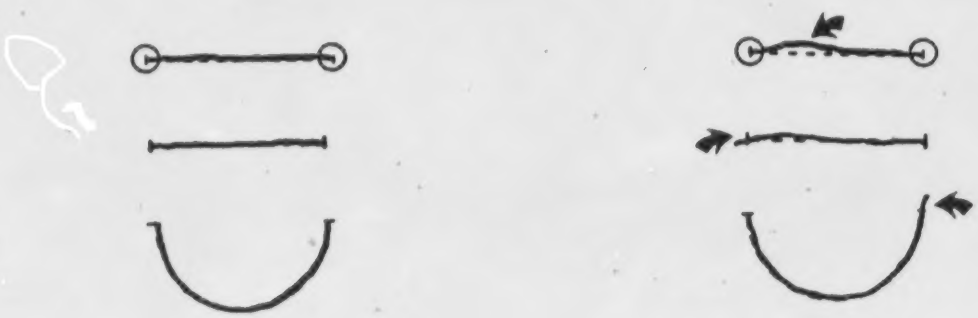
correct *incorrect*



Dash-Lined Items

A correct response is a single, unbroken pencil line which starts at one beginning point and ends at the other stopping point, touching all dashes.

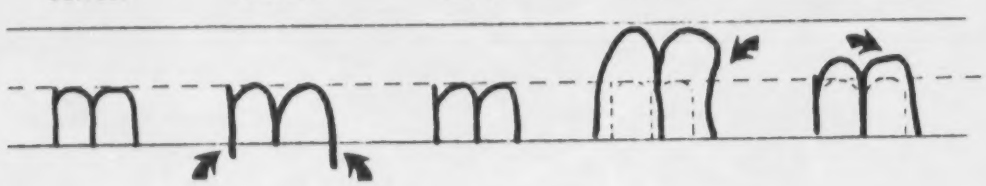
correct *incorrect*



Letter Tracing

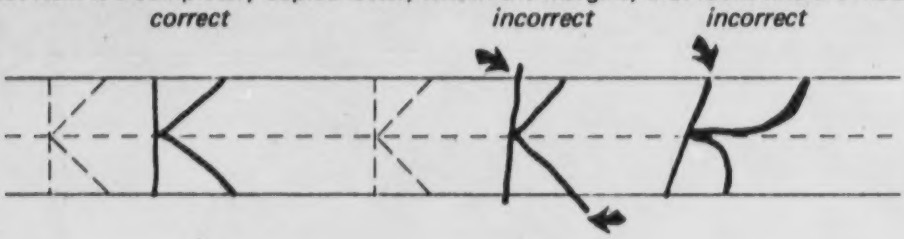
A correct response is a completely traced letter in which all the dashes have been touched. The pencil lines must stay within the outer margin lines.

correct *incorrect* *correct* *incorrect* *incorrect*



Copying Letters

A correct item is a completely copied letter, within the margins, that looks like the model.



Teaching Procedures

Management Activities

Management activities are things that you should do every day with every child to maintain groups that will work well with you.

> **Remember: Try to catch the children being good, and then reinforce what you like!**

This will apply to everything you do in a Behavior Analysis Follow Through Classroom; but for handwriting, there are also specific things to watch.

1. Give praise and tokens to children who are good group members:
   a. When they sit quietly at the table.
   b. When they sit with good posture.
   c. When they do not disturb anyone else.
   d. When they handle their pencils and work materials well.
2. Specifically, remember to reinforce the children for following the Five Golden Rules of Handwriting:
   a. Holding the pencil properly and using it to write only on the curriculum materials.
   b. Working from top to bottom on a page.
   c. Working from left to right on each line.
   d. Completing a page before turning to the next.
   e. Doing accurate work; using the correct strokes, tracing every model and copying every sample on each page.

Teaching Guide to Success in Handwriting

The teaching of handwriting can be broken down into two kinds of teaching activities. These are: (a) giving information to the students, and (b) scoring the work that the children do, thereby gaining information about their skills. These activities will be most effective if you practice them in the sequence presented below.

1. *Before class,* prepare the writing papers.
   a. Follow these steps when using the *Primer:*
      (1) Staple 7 to 9 sheets of the same level together. These stapled sheets are called a "packet." (After you get to know your children, you will find that some of them might do very well on the first few sheets of the level. If this is the case, make the packets for these children smaller, about 3 to 5 sheets.)
      (2) Write the child's name and the date in the upper left-hand corner of the first page of each packet. Later on, the child will be able to do this himself.
      (3) Place sharpened pencils on the table, ready for the first child who sits down at the lesson.
      (4) Have ditto sheets of each level in folders near the work area. This is so you can get a child new level sheets when he makes at least 15 out of 20 (75%) correct responses during a lesson.

Never mix levels together. A child must always master one level before he can move on to the next level.

b. When using *Write and See* or *Kittle's Penmanship*, simply make sure that each child's book and pencil are on the table, ready for the first child who sits down at the lesson.

2. *Be ready* to start teaching with the first child who is ready.
   a. Take out the appropriate book or packet of work sheets for each child.
   b. Make sure that each child's name and the date are in the upper left-hand corner of the first page, or on the front cover of the book.
   c. Help each child get started by modeling the first response for him. That is, show the child exactly what he should do by doing it for him. Describe what you are doing, too.
   d. Prompt the child to imitate your model; watch his efforts. Notice the strokes he uses, and how well he can trace the response.

      If the child makes a poor copy of your model, repeat the model giving him more information. Be positive!

      When the child makes a good imitation of your model, prompt him to continue working, making all of his responses just as good as the first one.

3. *When.*

   Child finishes an assignment, or child raises hand for help, or you as a teacher choose to work with a child,

   a. Look over his work, and praise consistent, accurate work.
   b. Point out a few responses (3-5 on a line), and ask child to pick the best one.

      If he chooses a poor response show him a good one, model, and explain in detail why it's better. Be positive! Ask him to choose again from another group.

      If he makes a good choice, praise (and give token sometimes) and ask why it's good. Point out why.

   c. When a good choice is made, go through the work just completed, **circle the correct responses**, and give praise (and tokens) for his good work. You may also score his work. (See the next section for scoring procedures.)
   d. To prompt a child to begin working independently:
      If going on to a new skill, show him how to do it (model), and ask him to make one.
      If not a new skill, simply say, "Let's see if you can do the rest just like you did that one."

      If poor response if made, show him correct part first and then show him how to improve his response.

      If good response if made, praise and tell him **why** it's good.

Now wait a minute! What do those terms mean? Let's look at each one:

Praise: not only the nice things you say to a child—be specific, and let the good things the child has done tell you what to say when praising.

Prompt: something you do or say to get a child to make an academic "work" response. "Please finish the page."

Model: you show the child what to do by doing exactly what you want him to do.

Discrimination Prompt: asking the child to discriminate to pick out one of his own responses that is better than some others.

Corrective Feedback: telling the child in detail what is good in his work, and what needs improvement—and then telling or showing him how to make the changes.

4. *Scoring:*

When the child has completed a page, check his work. **First**, quickly read the description at the top of the page to remind yourself what the child has been doing, and what will be accepted as a correct response. (See pages 59 and 60 for examples of correctly scored responses from the *Primer* levels.) **Second**, circle all of the child's responses that are correct. Give him detailed praise and tokens for correct responses.

If the child does not get 15 out of 20 correct,* he should continue to practice the same response, working on another page just like the one he has just completed. Praise the child for the correct responses he has made, and give him corrective feedback about how to improve those that are not acceptable. Be positive!

As soon as the child gets 15 out of 20 items correct* on a page, he can move to the next level. Put the child's completed sheet into his folder and give him a packet of sheets from the next level.

Remember: Whenever the child begins working on a new response, model that response for him!

A note of caution: Strict scoring is in the best interest of the student. If you relax your scoring rules and allow a student to advance to the next sheet before he has mastered the present one, you teach him to practice errors. If your contacts with the student consist only of praise, helpful suggestions, and encouragement, he will not mind having to repeat a particular sheet several times. If you have prepared the sheets in a packet, the child will not notice that he is doing any work out of the ordinary. Also, the children in a group are not competing to progress through the material; they should be allowed to work for accuracy at their own rate. It is more important that they learn to respond well, than that they simply move through the material quickly. When a child does master a particular level, you will want to emphasize that real progress is being made.

5. *Use tokens and praise:*
Reinforce children (give tokens and praise) for using the five handwriting rules, and when they make good responses. In the *Primer* a good response is one that touches all the dashes and stays within the margin lines. When you give praise and tokens, **describe** what the child did well. Try not to say something like, "That's nice, Johnny." Say instead, "Very good (give tokens), Lucius; I like the way you are correctly holding your pencil." Or, "Good for you, Darin (give token), that last line was perfect because it touched all the dashes."

A token is a symbol of your approval and is always given with praise when you've caught the child being good. Never give tokens or praise to children when they are "messing around," but do praise a child who is trying hard. If a child is having trouble, tell him simply and matter-of-factly what he is doing wrong. First model the response by tracing a "good" line for the child. Then have him copy your model. If the child has difficulty, guide him with your hand to obtain a good response. When he does it correctly, give him praise and tokens. Always wait until the child has made a correct line or letter before going on to the next child.

Special Problems

Now you know the basic procedures to support children with positive teaching. "But what happens when . . .?"

There will be problems arising in teaching that do not fit neatly in the sequence just suggested. Many of these situations will be unique, and you will have to use your judgment, your skill, and the help of others on the teaching team to deal with them. Some problems are fairly common, and can be anticipated. We have tried to describe some of these and make some suggestions of what to do if a child. . .

1. *Gets "stuck" on a level or letter.*
   a. Tell the child what your criterion is. In other words, make it clear what letter-making rules you are expecting him to follow. Then, model by making a "good" letter for him, and praise him immediately when he copies your model correctly.
   b. Make sure that your tokens and praise are given for correct handwriting. Do not give tokens and praise for poorly traced lines or letters.

*In *Kittle* or *Write and See*, children should be expected to do at least 80 percent of the items on a page correctly before going on.

c. Give tokens and praise immediately after the child has done something you like. If you are slow in praising, your children will have trouble.
d. Be specific in your praise. Always tell the child **exactly** what you like about his behavior or his work.
e. Find out what the child likes to do and make sure that it is available as a back-up activity.

2. *Refuses to work.*
Ignore him. A child can earn tokens and praise only for being good and working hard, **not** for "goofing around." Wait until a child returns to work, then praise him immediately for that.
3. *Talks to another child.*
a. Ignore the talker and give tokens and praise to other children who are working.
b. When the talker returns to work, reinforce him immediately by saying, "I like the way you returned to work, Lucius."
4. *Has trouble making letters in Programmed Reading.*
Check his work and decide which letters give him the most trouble. Prepare a packet of the letters he is having difficulty with, and use them during the handwriting lesson.
5. *Cannot distinguish between "Good" and "Bad" letter tracing.*
a. As you correct each line, have the child point out to you the letters or items he thinks are "best." Then you point out the letters and items you think are best, and tell him exactly why they are "good."
b. You make some "good" and "bad" letters on a paper, and have him tell you what makes them good, and what makes them bad.
6. *Cannot make 75 percent correct on a page.*
a. Do not have him erase the pages; erasing mistakes is not a skill worth practicing.
b. Make up supplemental sheets for practicing the specific problems. Do not give the same material over again, but rather give him feedback and new models to correct those errors.

Making the Handwriting Primer Interesting

Many teachers have told us that some children get tired of making the same kind of lines over and over. Here is something to add a little spice to your lesson. When a child finishes a level packet, or does an exceptionally good job on a level, give him one or more of the *Programmed Reading* letter sheets to trace. These are the letters he will need to know when he moves into the *Programmed Reading* books. Make a big deal about the special pages by telling the child that "since you've done so well, here is a very special page for you to finish."

Also, use multi-colored duplicator paper instead of white. A green, blue, or pink sheet stuck in the packet is always a nice surprise.

Using fine-point felt-tipped pens in wild colors (or colored pencils or sharpened crayons) can keep children working excitedly. For a child who is not working, use of a colored marker can be made contingent upon completing a set number of responses correctly with the regular pencil.

How to Keep a Check on Accuracy

It is essential that you carefully check the accuracy of the work of your handwriting students. A child must learn one skill before he progresses to the next one in the program. As a handwriting teacher, check your students' accuracy in several ways.

1. As a child works, carefully watch him form the letters. Help him learn to recognize his own improvements by describing and praising good responses. Prompt him to show you his correct work.
2. As you circle correct letters and words, keep count of the number correct. The number of responses will vary from page to page, but a child should have 75 percent correct in the *Primer* and at least 80 percent correct in *Kittle* or *Write and See* before going on in the book.
3. Keep a record of the child's performance on handwriting test sheets. If these sheets are kept in the same folder with the child's work in the *Behavior Analysis Handwriting Primer*, it will form a complete and up-to-date picture of that child's handwriting skills. Such a record will be very valuable when you make up supplemental worksheets for the child.

Working in a Behavior Analysis Classroom

A Word on Management And Organization

Handwriting is one of the three basic subject areas in which the children will be working. As the handwriting teacher, it is important that you know exactly what you are to teach, and how to teach it. Also, as one of the four adults in the classroom, you will be a member of a teaching team. It is important that you are also aware of your responsibilities to your team members. You will be expected to take a full part in managing the classroom; that is, to be active in making things happen smoothly, both when you are teaching and when the children are involved in other activities. In addition to teaching handwriting to small groups of children it is also your job to:

1. *Grade all papers* the same day, usually during your lesson.
2. *Keep a file* of each child's handwriting work. Have the child's folder near the work area so that when the lesson is over, you can quickly file the papers and prepare for the next group of children. (*NOTE:* A handy way to keep the folders organized is to put them in one of the boxes that was used to ship blank paper to the school. These boxes are just the right size to hold your folders neatly.)
3. *Help the teaching team* during the token exchange periods.
   a. When the instructional period ends, exchange the tokens the children have earned for the activities of their choice. Begin with the first child who puts away his materials and is quietly waiting to exchange.
   b. Take an active part in the exchange activities! As a member of the team, you should plan to share in the back-ups, making them more exciting for the children.
4. *Help the teaching team* fill out the Weekly Individual Progress Reports and Daily Schedule Forms. As you plan and work together with the other members of your classroom team, "managing" the classroom will become more and more natural for you. It certainly will take some effort, but the benefits you will gain—more time to teach your students, in a classroom free of tension—will be well worth it.

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District Advisors

The Behavior Analysis Program is a direct reflection of the skill and dedication that many individuals have brought to the task of serving the children and parents of FOLLOW THROUGH. These are people who have been Behavior Analysis District Advisors:

Joan O'Connell Barrett
Gladys Bright Baxley
Jill Becker
John Birkimer
Joan Jacobson Brigham
Thomas Brigham
David Buckholdt
Don Bushell, Jr.
Michael R. Clowers
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Lynn C. Weis
Randy Williams
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Patricia A. Wrobel

Curriculum Procedures

for the Behavior Analysis Classroom

Supplement for Staff Trainers

PS 010836

Donald A. Jackson, Series Editor

The University of Kansas Support and Development Center for Follow Through
Department of Human Development
Don Bushell, Jr., Director

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1

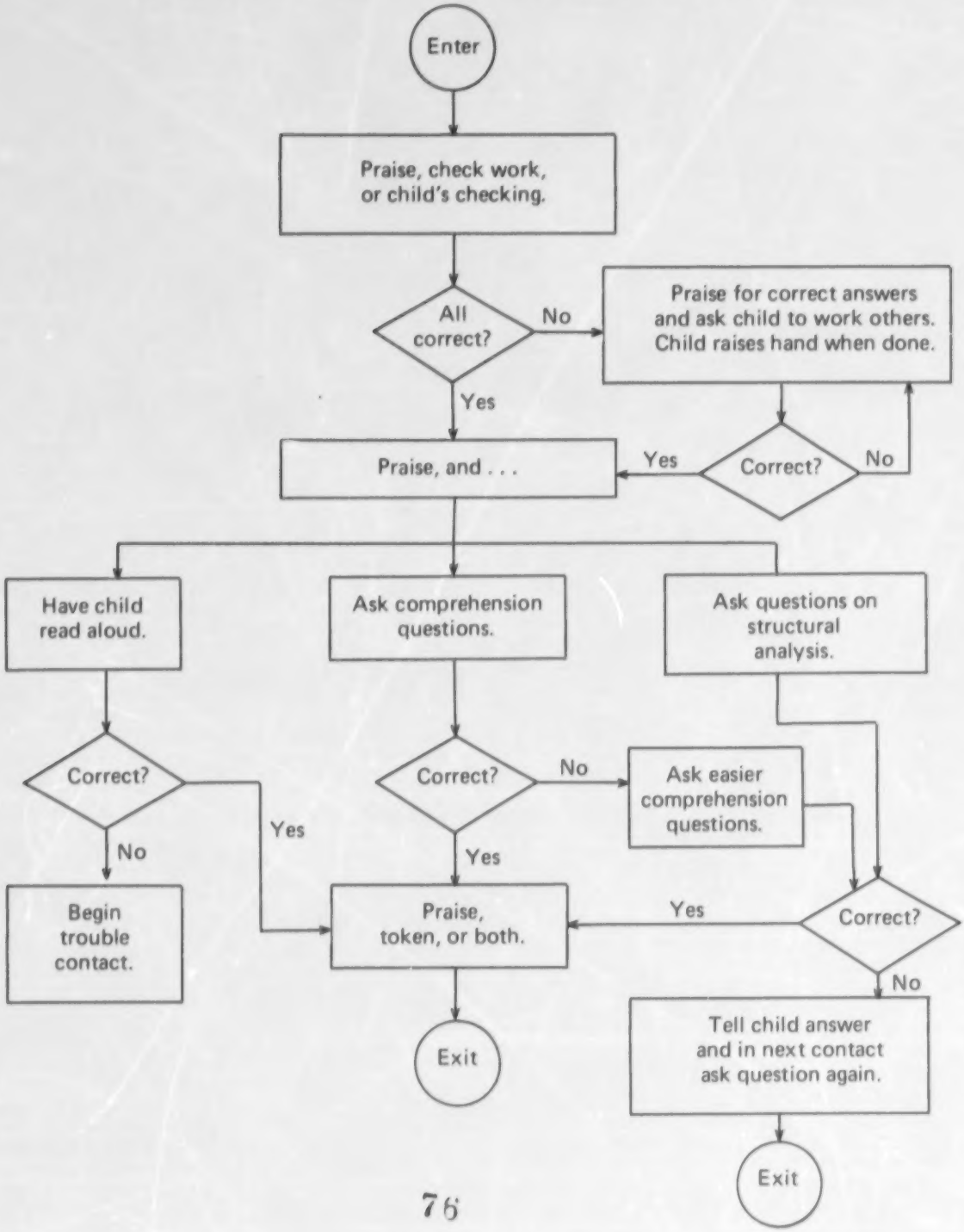
Programmed Reading

The **Programmed Reading** series is highly structured, and when used properly, it will provide instruction to the student even in the teacher's absence. Nevertheless, you will need to be sure that your teachers know the materials well enough to provide the additional help that children will require. As good as the **Programmed Reading** series is, the teacher must take advantage of opportunities to teach such things as compound words, suffixes, prefixes, digraphs, dipthongs, etc. All of these things are covered in the series, but they need to be stressed by the teacher. As staff trainer, you need to be sure that your teachers are adequately prepared to teach this subject matter.

The other category of teacher behavior that you are most concerned with as staff trainer is, of course, the teacher's ability to properly use the Behavior Analysis procedures for teaching in her classroom. You may want to use the flow charts on the following pages when you are working with teachers on improving their teacher-child contacts. If it fits into your training program, you may want to make copies of these charts and give one to each teacher. They might also be used in conjunction with a training workshop.

Monitoring or Teaching Contacts

Child completes assignment and raises hand, or child contact is made.



Trouble Contacts – New Words

How to contact a child who raises hand for help, and is at a new word.

Enter
Praise for hand-raising.
Say, "The word says _____. What does the word say?"
Correct?
Yes
No
Break word into parts, and say, "This part says _____. Can you say it?" "This part says _____. Can you say it?" "The whole word says _____. You say the whole thing."
Correct?
Yes
No
Praise and ask word again in next contact.
Praise for correct parts and ask again later, or tutor with supplemental materials.
Exit

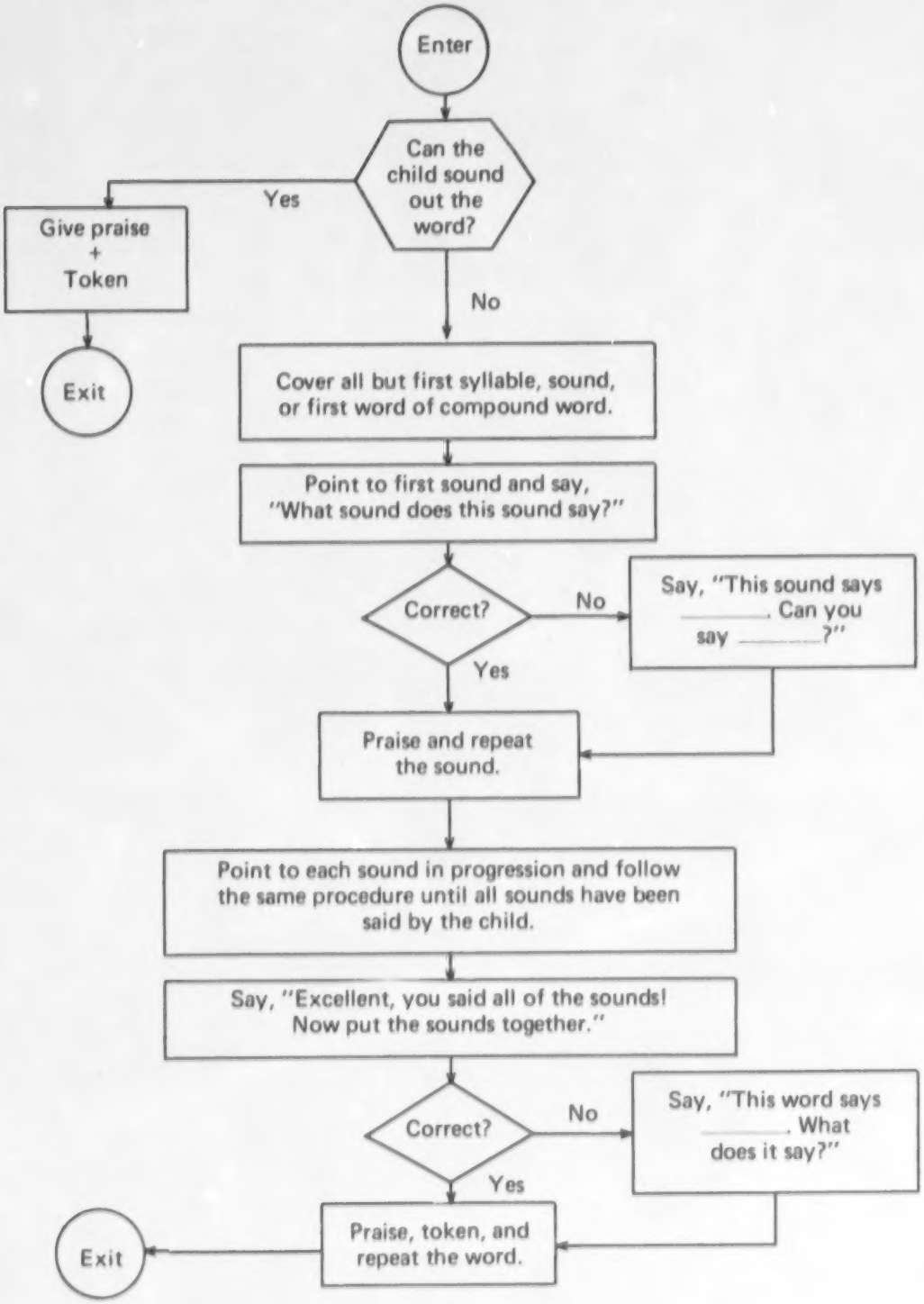
Trouble Contacts — Old One-Syllable Words

Child raises hand for help, and is at one-syllable word he had before.

Enter
Praise for hand. Say, "Sound out this word."
Correct?
Yes
Praise + Token
Exit
Point to first sound and say, "What does this sound say?"
Correct?
Yes
Praise
No
Say, "The sound is _____. Can you repeat it?"
Point to each sound, prefix, suffix, or digraph in progression until the child has said all the sounds.
Say, "You said all the sounds. Now can you put them together?"
Correct?
No
Say, "The word says _____. What does it say?"
Yes
Praise, token, and repeat the word.
Exit

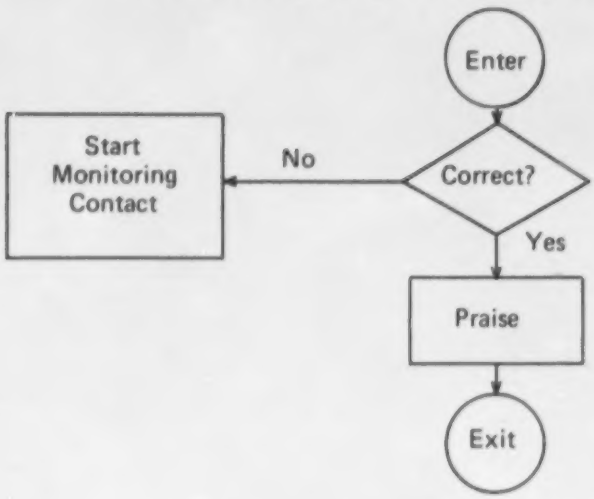
Trouble Contacts – Old Polysyllable Words

Child raises hand for help, and is at polysyllable word he has had before.

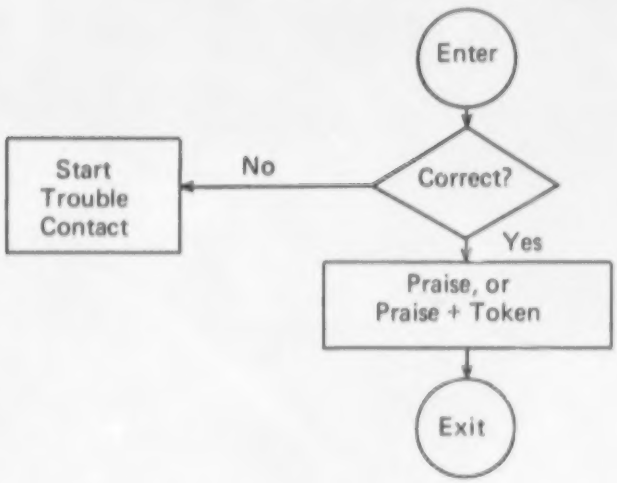

Enter
Can the child sound out the word?
Yes
Give praise + Token
Exit
No
Cover all but first syllable, sound, or first word of compound word.
Point to first sound and say, "What sound does this sound say?"
Correct?
No
Say, "This sound says _____. Can you say _____?"
Yes
Praise and repeat the sound.
Point to each sound in progression and follow the same procedure until all sounds have been said by the child.
Say, "Excellent, you said all of the sounds! Now put the sounds together."
Correct?
No
Say, "This word says _____. What does it say?"
Yes
Praise, token, and repeat the word.
Exit

Maintenance Contacts

How to make contact when child is making response in book.

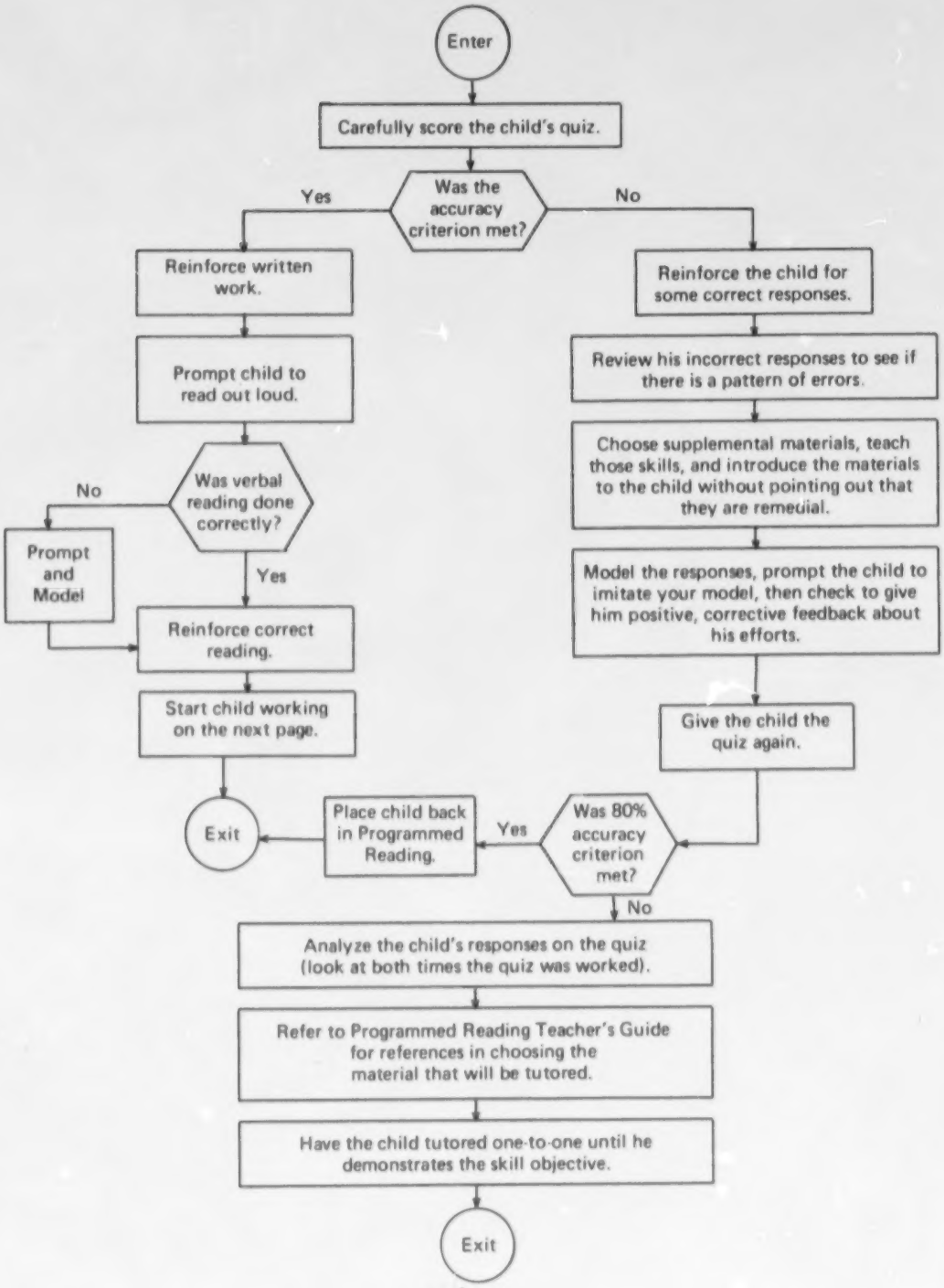


How to make contact when child is reading aloud.



Remediation Contacts

What to do when a child completes a test or quiz.


Enter
Carefully score the child's quiz.
Was the accuracy criterion met?
Yes
No
Reinforce written work.
Prompt child to read out loud.
Was verbal reading done correctly?
No
Prompt and Model
Yes
Reinforce correct reading.
Start child working on the next page.
Exit
Reinforce the child for some correct responses.
Review his incorrect responses to see if there is a pattern of errors.
Choose supplemental materials, teach those skills, and introduce the materials to the child without pointing out that they are remedial.
Model the responses, prompt the child to imitate your model, then check to give him positive, corrective feedback about his efforts.
Give the child the quiz again.
Was 80% accuracy criterion met?
Yes
Place child back in Programmed Reading.
No
Analyze the child's responses on the quiz (look at both times the quiz was worked).
Refer to Programmed Reading Teacher's Guide for references in choosing the material that will be tutored.
Have the child tutored one-to-one until he demonstrates the skill objective.
Exit

2

Singer Mathematics Programs

The **Singer** math program makes use of set theory, rudiments of algebraic equations, and geometry concepts. Needless to say, math teachers will need to have a thorough knowledge of these concepts in order to present them effectively to students. Since most math teachers in Behavior Analysis classrooms will not have college training in modern mathematics, Staff Trainers and teachers must provide the necessary training to familiarize math paraprofessional teachers with the concepts contained in the **Sets and Numbers** series. The **Singer Mathematics** Teaching Guide for Behavior Analysis classrooms is designed to help trainers and teachers accomplish this by providing all of the necessary information on the use of the series in Behavior Analysis classrooms.

This supplement will help you train math aides. The suggested activities and questions might be used in a workshop or for individual training. They might also be compiled to be part of a self-instructional unit on **Singer** math procedures. The parts of the supplement correspond to the sections of the Behavior Analysis **Singer Mathematics** Teaching Guide.

Structure of the Singer Series

Staff Trainer

State questions appropriate for the books a trainee is working with. The aide should know where the quizzes are, what they are called in her children's books, whether or not the children may write in the book, and the color of the next book the children will go into. This is especially important for Books 3-6 since they have no numbers on them.

Questions

1. What color is Book K? Book 4? Book 2?
2. What do the blue stripes denote in Book 1?
3. What do the round-up pages denote in Book 3?
4. Does a child write in Book 1? What about Book 3?

Placement Procedures

Staff Trainer

Give the trainee a list of his or her new students with their placement from last spring. Have the trainee determine which in-book test should be given each child and how many problems the child should get correct to progress. Or, give the following quiz:

Quiz

These are placements from the end of the last school year. Determine which test you would give these children and how many problems a child would need to do correctly to achieve criterion.

Placement Last Spring	Page Number of Test to Give	How Many?
Marketa, Book 2, p. 135	118-212	50
Timothy, Book 2, p. 53	_____	_____
Julie, Book 1, p. 220	_____	_____
Chuck, Book 1, p. 58	_____	_____
Edie, Book 1, p. 128	_____	_____

How to Prepare to Teach Singer Math: The Glossary

Staff Trainer

Use the Scope and Sequence Charts in Appendix B to select the new terms that a teacher needs to know for the books that she is teaching. Have the teacher define the terms you select. Xeroxing the Glossary is a good idea so that it is easier to use.

Questions on the Glossary

1. Set: A _____ of things.
2. Braces: Symbols to _____.
3. Empty Set: The set with _____ things in it is an empty set.
4. Equal Sets: Sets are equal when they have the _____ things in them.
5. Number of a Set: The number of a set tells _____ things are in a set. N (xxx) = 3, N (xx) = _____.
6. Numeral: A _____ for a number. Circle the (answer to the first question) for two: 3 2 two 1+1 N(xx)
7. Unequal Sets: Sets are unequal when they _____ have the same things in them.
8. Union of Sets: The operation of _____ two sets _____.
   (X X X) U (X) = (XXXX) (X O) U (O) = _____.
9. Difference of Sets: The operation of _____ one set from another set.
   (X O) - (O) = (X) (X X O) - (O) = _____

How to Prepare to Teach Singer Math: The Review of Concepts

Staff Trainer

Have trainees locate the **Review of Concepts** for their children's placement (or use the questions below). Have the trainee fill out the worksheet on page 13 on a **Review of Concepts** that corresponds to one of her children's placements. Appendix B is very important here, for it tells what new concepts are presented in each **Review of Concepts** and what previous concepts are necessary to understand the new concept.

A good activity would be to have the trainees give their explanations for problems to a group of trainees. This exposure could be used for several workshops.

Questions

Say that these are your children's placements at the first of the year. Put the page number in the Teacher's Manual where the **Review of Concepts** occurs.

Child 1, Book 2, p. 203 _____

Child 2, Book 1, p. 220 _____

Child 3, Book 1, p. 226 _____

Child 4, Book 3, p. 45 _____

Child 5, Book 2, p. 56 _____

Child 6, Book 5, p. 111 _____

How to Prepare to Teach Singer Math: The Teacher's Manual

Staff Trainer

The following quiz can be used to show teachers how the Teacher's Guide can be useful for explanations and instructions. The trainee will need to read page 119 in the Teacher's Manual for Book 2, and perhaps also page 113 for an explanation of subsets, before completing this quiz.

Questions

1. What is the symbol for subset? Does the subset sign deal with objects or numbers?
2. What is the symbol for less than? Do you use the less than sign with objects or numbers?
3. How do you read {X} C {XO} ?
   How do you read N {X} N {XX} ?
   How do you read $1 < 2$?
4. Should the children understand the distinction between the subset relation and the less than relation of numbers?
5. What should you emphasize about the symbol <?
6. What are the new technical terms introduced?
7. What is the new symbol introduced?
8. Write a short explanation to explain to a child how to do problems:
   a. on page 153,
   b. on page 159,
   c. on page 161.

Teacher's Manual Summary _____

Pages of Child's Book _____

Worksheet

Definitions of New Vocabulary or Mathematical Symbols: _____

Previously Taught Concepts that Refer to New Vocabulary: _____

Write Instructions for These Problems: _____

Write Instructions for These Problems and Use Concept Specified in Your Instruction:

How to Teach Singer Math in Behavior Analysis Classrooms

Staff Trainer

Practice role play with the trainees. Have one be the teacher, one be a trainer, and the rest be children. Have the trainer give feedback to the teacher in terms of these criteria:

–All On-Task Contacts

–Zero Disapproval

–Specific Praise Given with Tokens

–Prompts are Followed by Praise

–Teacher Requires Children to Verbalize Math Concepts

Show a tape of yourself and have the trainees evaluate it. At the next workshop have a tape of one of the aides to evaluate, or do this on an individual basis in the trainee's own classroom.

Questions

1. Math teachers should _____ inappropriate behavior.
2. Math teachers should sit while teaching. True _____ False _____
3. Slow contacts are necessary so that problems can be explained thoroughly to children. True _____ False _____
4. Make praise _____ to what the child has just done.
5. The cardinal rule of math teaching is to require children to _____ mathematical sentences, and to _____ explain how they completed problems.
6. What should tokens be given for?
7. Which is more efficient: giving a child an assignment and having him raise his hand when he's done, or checking the children's work as they go?
8. Whenever you ask a child to do something and he does it, what should **you** do?

How to Evaluate Student Progress Using WIPR Feedback

A copy of a computer feedback form is given below. The right side of the print-out refers to math. The first column gives each child's book and page placement for the day you filled out the WIPR. The next column is the step number that aligns with that book and page placement.

In the next column is a plus (+) or a minus (-). A child gets a (+) if he has done more pages than were targeted for him or if he did the exact number of pages targeted for him. and a (-) if he did fewer pages than were targeted for him. The success ratio is the number of pages a child did over the number of pages a child was targeted to do. Finally, the last column has the book and page number where the child should be by the next week.

BEHAVIOR ANALYSIS REPORT TO: CASEBIER WOODLAWN TRENTON
REPORT NO. 9, VERSION - G CODE - 050413160 KG. 1108
MESSAGES -

		READING					MATH			
STUDENT ID	NAME	ABS	11/07 BK-PG	STEP	SUCCESS W*RATIO*Y	11/14 TARGET	:TRG: :OPT:	11/07 BK-PG	STEP	SUCCESS W*RATIO*Y	11/14 TARGET
01	ALLYN, BO		PR 91	4	+ 26/ 26+	1A 12	B:A	1 - 31	6	+ 7/ 6+	1 - 37
02	ASMUS, RO		PR 91	4	+ 26/ 26+	1A 12	B:A	1 - 28	6	+ 6/ 6+	1 - 34
03	ARTEMUS,		PR 91	4	+ 26/ 26+	1A 12	B:A	1 - 19	5	+ 7/ 7+	1 - 26
04	BAILEY, T		PR 137	5	+ 30/ 30+	1A 35	B:A	1 - 42	7	+ 6/ 6+	1 - 48
05	BALL, MAR		PR 137	5	+ 30/ 30+	1A 35	B:A	1 - 17	5	+ 8/ 7+	1 - 24
06	BEECH, CH		1A 35	5	+ 30/ 30+	1A 57	B:A	1 - 50	7	+ 5/ 5+	1 - 56
07	BOND, KA-I	1	PR 138	5	+ 30/ 23+	1A 36	B:B	1 - 48	7	+ 15/ 11+	1 - 63
08	BRITTAIN,	1	1A 32	5	+ 30/ 23+	1A 54	B:A	1 - 35	6	+ 7/ 4+	1 - 41
09	BROMWELL,		PR 71	3	- 6/ 20 +	PR 92	D:B	1 - 6	5	+ 16/ 11+	1 - 21
10	CELL, SUS		PR 137	5	+ 30/ 30+	1A 35	B:A	1 - 25	6	+ 7/ 7+	1 - 31
11	CUNY, WIL	1	PR 139	5	+ 30/ 23+	1A 37	B:A	1 - 57	7	+ 8/ 3+	1 - 63
12	DAVIS, RO		PR 71	3	- 6/ 26+	PR 92	D:A	1 - 7	5	+ 9/ 8+	1 - 14
13	GLADNEY,		PR 144	5	+15/ 15+	1A 35	D:A	1 - 73	8	+ 5/ 4+	1 - 78
14	JOHNSON,		PR 71	3	- 6/ 26+	PR 92	D:B	K - 65	4	+ 15/ 15+	1 - 2
15	KENNY, JU	1	PR 102	4	+26/ 20+	PR 126	B:B	1 - 62	8	+ 15/ 11+	1 - 77
16	PORTER, R		PR 138	5	+ 30/ 30+	1A 36	B:A	1 - 25	6	+ 7/ 7+	1 - 31
18	POWERS, T		PR 137	5	+ 30/ 30+	1A 35	B:A	1 - 53	7	+ 5/ 5+	1 - 59
20	RUSSELL,		PR 102	4	+ 26/ 26+	PR 126	B:A	1 - 32	6	+ 6/ 6+	1 - 38
21	SMITH, RO	1	1A 32	5	+ 30/ 23+	1A 54	B:A	1 - 65	8	+ 4/ 3+	1 - 70
22	TAYLER, R		PR 102	4	+ 26/ 26+	PR 126	B:A	1 - 28	6	+ 6/ 6+	1 - 34
23	THOMPSON,	1	PR 137	5	+ 30/ 23+	1A 35	B:A	1 - 44	7	+ 6/ 4+	1 - 50
24	TURNER, M		1A 32	5	+ 30/ 30+	1A 54	B:A	1 - 88	9	+ 4/ 4+	1 - 92
25	UNDERMAN,		PR 137	5	+ 30/ 30+	1A 35	B:B	1 - 65	8	+ 16/ 15+	1 - 80
26	WALTON, G		1A 35	5	+ 30/ 30+	1A 57	B:A	1 - 76	8	+ 5/ 4+	1 - 81
27	WHITE, BR		1A 32	5	+ 30/ 30+	1A 54	B:B	1 - 65	8	UPDATED PLACEMENT	
28	WILDER, T	2	1A 32	5	+ 30/ 18+	1A 54	B:B	1 - 26	6	- 5/ 9+	1 - 41
29	WRIGHT, L	4	PR 121	5	- 0/ 5 +	PR 143	B:B	1 - 9	5	- 1/ 2+	1 - 24
30	GRAY, THO	1	PR 137	5	+ 30/ 23+	1A 35	B:A	1 - 26	6	+ 7/ 5+	1 - 32
31	#31	1	PR 115	4	+ 30/ 23+	PR 139	B:A	1 - 38	6	+ 7/ 4+	1 - 44
32	#32		PR 58	3	+ 23/ 23+	1A 2	B:A	K - 33	2	+ 12/ 10+	K - 43
33	#33				NO DATA		A:A			NO DATA	

For example, in the computer print-out, Karen Bond (number 7) was on page 48 of Book 1, on November 7. This corresponds to step 7 on the WIPR chart. Last week she did more pages than were targeted for her. She did 15 pages and was targeted for 11.

The last column of the print-out is most important to you. When you receive your feedback each week, figure out how many pages each child needs to do by the next week to reach the target. Divide this number by five, since there are five days between WIPR's. This number will then tell you how many pages a child must do **each day** to complete his target. If a child does not complete this number of pages during his first math period in the day, he goes to math again that day. This will require some careful planning with your teams concerning scheduling.

Questions on the Feedback Report

1. What page was child # 4 on on November 7?
2. Did (s)he meet the target?
3. How many pages was child # 11 targeted for last week?
4. Where should child # 23 be on November 14?

Looking at the feedback sheet, fill out this form:

Child's I.D. No.	Pages to Complete by 11/14	Pages to Do Each Day
6	6	6/5=1 (2 on one day)
15	15	15/5=3
20		
23		
28		

Staff Trainer

Have trainees fill out the sheet on page 17 for their own children and use it to schedule their students' time in math instruction.

Teacher _____ Week of _____

Children Below Target	Child's Daily Target	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY	
		met?	time	met?	time	met?	time	met?	time	met?	time

Planning Remediation Activities

Staff Trainer

Have the trainees bring to a workshop a student's test that shows problems. Using the student's test, have the trainee complete the form below. The key idea is to get trainees to specify objectives. Also important is to get trainees to produce materials other than "dittos," "boardwork," or the "flannel board."

Problem

Write a sequence for remediation:

1. Skill to remediate (What do you want the child to do?).
2. Materials to use.
3. Outline the steps you will use to remediate the problem.

Group Remediation Activities

Staff Trainer

Have the trainees write a group presentation and produce the materials for one. See Appendix C for examples of supplemental ideas. Topics for group presentations can be taken from the scope and content charts in Appendix B. The important thing to stress is that group activities should **not** be done as a matter of course, but rather to remediate specific deficits.

Questions

1. When should group presentation be used?
2. How long should it be?
3. How should you design your materials?
4. What materials would you use to present "halves" in a group presentation?

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Northern Cheyenne, Montana

Follow Through
Lame Deer, Montana 59043
Ph. 406-477-6284

Philadelphia, Fennsylvania

C.A. Arthur School
20th & Catherine Sts.
Philadelphia, Pennsylvania 19146
Ph. 215-732-1171

Duckrey School
15th & Diamond Sts.
Philadelphia, Pennsylvania 19121
Ph. 215-763-0568

Pratt-Arnold School
22nd & Susquehanna Sts.
Philadelphia, Pa. 19132
Ph. 215-235-3355

Pittsfield, Massachusetts

Central Annex, 2nd Street
Pittsfield, Massachusetts 01201
Ph. 413-499-1904

Portageville, Missouri

Central Elementary School
P.O. Box 280
Portageville, Missouri 63873
Ph. 314-379-3371

Trenton, New Jersey

Board of Education Annex
108 N. Clinton Ave., Rm. 22?
Trenton, New Jersey 08608
Ph. 609-396-7647

Waukegan, Illinois

Follow Through
1020 Glen Roc?
Waukegan, Illinois 60085
Ph. 312-336-3100

District Advisors

The Behavior Analysis Program is a direct reflection of the skill and dedication that many individuals have brought to the task of serving the children and parents of FOLLOW THROUGH. These are people who have been Behavior Analysis District Advisors:

Joan O'Connell Barrett
Gladys Bright Baxley
Jill Becker
John Birkimer
Joan Jacobson Brigham
Thomas Brigham
David Buckholdt
Don Bushell, Jr.
Michael R. Clowers
Michael J. Colyer
Donald S. Dorsey
Darwin Eakins
Dan Ferritor
Stephen R. Finfrock
Paul S. Graubard
W. Rodney Hammond
Michele Minnis-Hazel
Gilbert L. Hoffman
Carolyn Jarvis
Judith Jenkins
Michael B. Kelly
Nancy Krompotich
Katherine LeLaurin
Thomas McLaughlin
Mary Louise Michaelis
Bernard Migler
Karen S. Morton
Annabelle Nelson
Arlene Rabinowitz
Eugene A. Ramp
Ed Richardson
Sara Rule
Bernard Salzberg
Charles L. Salzberg
Richard Saudargas
John W. Scott
R. Rex Stonger
Don R. Thomas
Russell M. Tyler
Ernest Washington
Lynn C. Weis
Randy Williams
Robert G. Wittsell
Patricia A. Wrobel